MASTER OF SCIENCE IN ANALYTICS
CLASS OF 2018

STUDENT PROFILES

Employer information sessions: September–January
On-campus interviews: January–March
Graduation date: May 5, 2018

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MSA CLASS OF 2018 DEMOGRAPHICS

Number of students enrolled: 115

U.S. citizens or permanent residents: 83%

North Carolina residents: 62%

Number of countries of origin: 20

Prior states of residency: 19

Percent who are women: 47%

Average age / Median age: 25 / 24

Average number of years since undergraduate degree: 3

Graduating with academic honors as undergraduates: 62%

Average undergraduate grade point average: 3.57

Percent enrolled with a prior graduate degree: 20%

Previously employed full-time (3 or more years): 45%

Range in age: 20 – 40
Three is a common denominator in Daniel’s life story. He grew up within three very different families, he has lived in three different regions of the world, he fluently speaks three languages, and he has studied three disciplines (Biotechnology, Information Technology, and Analytics). Daniel identifies himself as a translator, integrator, and facilitator.

Daniel excels at adapting to new systems, cultures, and environments. As a 13-year-old, he left Costa Rica and moved to Europe. One year after his arrival, Daniel was fluent in French and fully integrated in a new system and culture. Living in Brussels and Switzerland sparked a passion for bringing together diverse individuals and their ideas to enhance people’s perceptions of the world around them.

Recently, Daniel pioneered a George Washington University project to implement a Technology Assessment Tool for two international, non-governmental education centers—one in Senegal (higher education) and the other in Guatemala (elementary education). In addition to his diverse academic background, Daniel has experienced the rewarding opportunity of tutoring Spanish, French, math, and science. Such contributions brought to his attention the immense potential of using data-driven insights as a communications tool, which is unconstrained by language and culture.

His experiences have strengthened his desire for contribution and integration as a facilitator to his community, especially to those in need. Daniel strives to generate substantial progress and understand the science behind analytics while also communicating data-driven insights to individuals from all backgrounds.
Matias Ávila

Hometown: Pamplona, Spain
Citizenship: Spain
Languages: Spanish

EDUCATION

- University of Navarra
  Degree in Economics, 2017
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Matias has always aspired to work hard and achieve success in whatever he puts his mind to. At the University of Navarra in Spain, ranking in the top 1% of the students in the Department of Economics, he worked as a teaching assistant and delved into economic history, philosophy, decision making, and quant classes. During his senior year, he studied at the University of British Columbia, Canada, for one semester. In the second semester, he attended a short MBA programme for undergraduate students at IESE Business School, Spain, where he completed his bachelor's degree. During his degree thesis, he wasn't sure about the topic. However, he had the chance to do a consultancy project for the bank BBVA, the car manufacturer Volkswagen, or the University Clinic of Navarra. He was intrigued: what did a bank, a car maker, and a hospital have in common? It was then that he first came across data science. He was thrilled to find a discipline that covered a broad range of intersecting areas. Not only did he find the topic for his final project, but also his real vocation.

During his summer breaks, he had the opportunity to expose himself to the professional world. First, he was placed in an internship in Leeds, UK, at a company subcontracted by the British Ministry of Health. His second internship, was at PwC in Frankfurt, Germany. There, he also had the opportunity to explore the European Central Bank and learn about monetary policy. Finally, came a stint at CEMFI in Madrid, Spain, a recognized economic research institution set up by the Central Bank of Spain.

When Matias is not in front of a computer, he likes playing the guitar in bars, watching rugby, and honing his Portuguese. He also enjoys travelling around Europe with his friends during long weekends.
A long-time catcher on the baseball diamond, Sam explored the nuances of teamwork and effective leadership at an early age. His experience in sports blossomed into a passion for understanding how people deal with adversity: while some responded to tough love, others required a more compassionate approach. Off the field, Sam took interest in technology, spending countless hours dismantling and rebuilding whatever computers, cameras, and clocks he could get his hands on. His interest in all things technical paired with his skill on the field led Sam to Tufts University, where he studied computer science and played baseball.

At Tufts, Sam developed an insatiable appetite for self-improvement both in the classroom and on the field, pursuing his passion for baseball and developing interests in nutrition, sociology, and cyber security. He spent his undergraduate summers at Putnam Investments, completing a variety of internships in application development before joining the data science team. Sam leveraged his computer science background and knowledge of Putnam’s technical infrastructure to support newly-hired data scientists. Drawn by the challenge of communicating complex problems to non-technical audiences, he shifted his focus away from development and toward analytics.
At a young age, Layton was fascinated by the world around him and always pondered the deep and unusual questions such as, “What holds the hair on our heads?” Since that humble beginning, he has aspired to learn more, and through that process, discovered his passion for math. The unique capacity of numbers to provide meaningful insights into any topic captivated him.

In college, Layton sought practical applications for his mathematical interests and the business sector offered many options that led him to triple major in finance, accounting, and business mathematics. Layton expanded his global knowledge by immersing himself in a reinsurance program in Zurich, Switzerland, where he was also excited to zipline from the top of First Point in the Alps. In addition to class, Layton worked for the Prince of Saudi Arabia; perhaps not directly, but rather his company, Saudi Basic Industries Corporations (SABIC). As a Consolidation Analyst intern within a team of six in the Capital Division, Layton collaborated to solve ever-changing problems regarding cost analyses, account reconciliation, and risk management. The challenges faced through these experiences highlighted the importance of data analytics to reveal truths and guide decision-making.

During his free time, Layton can be found on the soccer field enjoying the sport he has played since the age of four, or honing his problem-solving and strategy skills playing tennis, chess, and video games. To relax and unwind, he enjoys nothing more than curling up with a good fantasy novel.
During his younger years, Emerson's family spent a lot of time on the move. He moved seven times across three states before the age of 12. This experience helped foster his ability to be comfortable in uncomfortable situations, to adapt quickly, and to make friends wherever he goes. This served to nurture Emerson's ambition; he is a man focused on becoming successful no matter the challenges, no matter when, no matter where. He is eager to prove himself and his abilities that grow with each new challenge that he takes on.

One of the greatest challenges Emerson has embraced was the pursuit of his college education. Circumstances encountered upon graduating high school stood in the way of Emerson and his dream to attain a college education. Determined to fulfill his dream, he acquired a full-time job as a server at a full-service restaurant so that he could fund his community college education. After two years of hard work he was accepted to the University of Alabama where he obtained his bachelor's degree in both Finance and Economics. He did so while maintaining his job as a server, so that he could continue to develop his strong interpersonal skills and love for people and teamwork.

Outside of work and school Emerson makes time to further challenge himself and grow personally by doing things that he thoroughly enjoys, including rigorous physical activity, reading everything from the newspaper to suspense novels, and building computers. His interests and ambitions span a multitude of topics and he revels in learning new things and accomplishing his goals. Emerson feels that his experiences as a leader, student, server, brother, and son have prepared him for a challenging career of continued success.
Travis “TJ” Beaulieu

Hometown: Apex, North Carolina
Citizenship: U.S.

EDUCATION

- University of North Carolina at Charlotte
  B.S.B.A., Management with minor in Economics, 2011
- SAS Certified Base Programmer, 2017

Travis has long been interested in human and environmental health. As a dedicated soccer player during all four years of college, he was very cognizant of food and nutrition. Travis’ work at RTI International broadened his perspective on food and agriculture as it relates to climate change, economics, and public health. This knowledge and passion led him to pursue a consulting position with a non-governmental organization in Ghana, where he worked to expand agricultural markets in West Africa through environmentally sustainable practices.

While these experiences were extremely valuable in developing Travis’ project management and program evaluation skills, he realized that the quality and quantity of data being leveraged were insufficient to provide well-informed decisions. Travis sees the value in data-driven solutions using sound statistical techniques, and he is eager to approach complex problems as an analytics professional.

When he is not studying new methods and tools for data analysis, Travis does not sit still for long. Since playing in the 2011 NCAA National Championship in his last collegiate game, he has channeled much of his energy from soccer into adventure sports and travel. For example, as an avid scuba diver and hiker, he descended upon a school of 50 hammerhead sharks during a dive in the Galápagos Islands, and summited the active volcano, Mount Nyiragongo, in the Congo during a three-month backpacking trip around southern and eastern Africa.
From slinging hay bales on his grandparents’ farm to digging ditches as a construction worker during the summers, Chris’ rural roots underlie his appreciation for the power to automate and optimize complex processes using advanced analytics.

Affectionately referred to as ‘the why guy’ by friends and family, Chris is known for his insatiable curiosity and eclectic interests. Not least among these are mathematics and philosophy, which he studied at NC State before graduating with honors. While there, Chris also explored interests in leadership and organizational dynamics by serving as both the Resident Body President and the College of Humanities President. These roles provided him with invaluable opportunities to increase his self-awareness through learning from his peers and advocating their interests across organizational boundaries and disciplines.

Upon graduating, Chris transitioned into the world of management consulting as a research analyst concentrating on the energy industry. This unique role exposed him to some of the world’s largest companies and allowed him to address their most difficult problems, including designing risk models for megaprojects and developing strategic roadmaps for the adoption of emerging technologies. However, it wasn’t until a market analysis he co-authored gained national media attention for fundamentally changing industry perspectives that Chris realized the full impact of his analytical insights. Since then, Chris has devoted his time to honing his analytical skills and expanding his firm’s capabilities by founding a first-of-its-kind internal analytics working group, which leverages peer-education to stay abreast of emerging techniques and technologies.

Chris Becker

Hometown: Lancaster, Pennsylvania
Citizenship: U.S.

EDUCATION

- North Carolina State University
  B.S., magna cum laude, Mathematics, 2015
  B.S., magna cum laude, Philosophy with minor in Cognitive Science, 2015
- SAS Certified Base Programmer, 2017
Sophia Bessias

Hometown: Durham, North Carolina
Citizenship: U.S.
Languages: Spanish

EDUCATION

- University of Copenhagen
  M.P.H., Public Health, 2014
- University of Pennsylvania
  B.A., *summa cum laude*, Health and Societies (International Health) with minor in Hispanic Studies, 2010
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Sophia delights in finding a workaround. Her living space is filled with repurposed materials, like the armchairs reupholstered for a change of style, or the second-hand frames taken apart and reassembled to house her favorite prints. She has developed a reputation among her peers for finding creative solutions and seeking connections between ideas. When one approach leads to a dead end, she has an alternative ready to implement—a tendency that has served her equally well in case management and coding.

Sophia’s interest in data science grew out of her career in public health. While studying abroad in Buenos Aires, Argentina, she collected qualitative and quantitative data for a government report on health needs of transgender residents. She discovered her enthusiasm for R programming while analyzing data from the Danish national prescription registry to study patterns in use of ADHD medications. As a project coordinator in a health department setting, she used routinely collected data to make recommendations for process improvement and built a database in MS Access to track uptake of a novel HIV prevention method. These solutions raised new questions that inspired her to pursue analytics full time.

Sophia enjoys exploring the many ways to achieve social impact through data science. She is an active participant in the local community, which she prefers to navigate on foot. If she tells you something is within walking distance, it’s best to inquire further—unless you, too, enjoy walking several miles to your destination.
Growing up in the heart of Pennsylvania’s coal country is not without its challenges. In Lindsay’s case this included being raised by old fashioned grandparents who believed a semi-outdated set of encyclopedias and a typewriter were perfectly acceptable for any academic pursuits. Despite their lack of appreciation for technology, Lindsay’s grandparents encouraged her to expand her horizons through books as well as education.

Although challenging at times, it was this lack of technology early in life that led Lindsay to develop a passion for learning that culminated in a diverse set of interests: math, science, technology, psychology, and human behavior. Her work at Amazon as a problem solver and team lead solidified these interests and first introduced her to the power of analytics on a large scale. Lindsay’s later experience as a small business owner, combined with her undergraduate coursework and volunteer work, made her realize analytics is a versatile field that incorporates her desire to learn and solve problems across countless disciplines. While technology and data analytics are important, her experiences taught her that the people in an organization are just as crucial to its success.

When her nose isn’t in a book, Lindsay (also known to her mother as “Betty Crocker”) can be found in the kitchen experimenting with new recipes or making her much sought after banana bread. She also has a love of Steelers football, IoT, and weekend trips exploring new cities.
Bryson E. Bonham

Hometown: Raleigh, North Carolina
Citizenship: U.S.

EDUCATION

- Virginia Tech
  B.S., Biochemistry, 2014
- SAS Certified Advanced Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Bryson’s strategic mindset and competitiveness led him to become a world champion in a tactical card game, Pokémon, by age 12. It taught him deliberate learning and grit—a mentality he now uses to succeed as an MSA student.

As captain of the Virginia Tech Billiards Team, Bryson developed a statistical ranking system to track and improve performance. Combining player’s placement scores with an algorithm designed to convert win/loss data into a numeric quantity, this system provided a training program for each member and was vital to building the 2012 team that would place 1st in the National Pool Championship.

After graduating from Virginia Tech, Bryson applied his industrious nature to start an independent research project. As the founder, Bryson enlisted his team of five VT graduates, including political scientists and mechanical engineers, to develop a plastic-based product. Bryson quickly realized his need to improve his skills in analytics and set off on a three-year long journey to joining the 2018 MSA class. During this time, he worked as a team lead and Research Associate at the biotech company, Meso Scale Diagnostics (MSD), where he applied his growing statistical skills to develop a tracking system for antibody selection. It was because of his teamwork and leadership that he was tasked with the development of one of MSD’s highest selling antibodies.

Bryson continually expands his interests and strives to always push himself to grow and learn. In July, he completed his first half-marathon and is now training for his first triathlon. Bryson loves taking on new challenges, building teams, and enlisting his friends and family in his passions. He hopes to work in an environment where he can apply his strategic perspective, leadership, and tenacity.
It's nearing midnight and Michael is fielding his eighth call of the night from the production floor. He quickly absorbs information to gain an understanding of the problem before providing its solution, then resumes his work debugging code or designing a better LED.

This describes an average night for Michael when he worked at Cree, an LED manufacturer. He excels when facing challenging projects that require cohesive solutions due to his troubleshooting skills and ability to break down complex information. The one constant throughout the many projects he worked on was the extraordinary amount of data collected during the manufacturing process. In finding repetition where it shouldn’t exist or modeling untested conditions, Michael discovered a love for analytics.

Michael served in a multitude of roles at Cree due to his willingness to accept new responsibilities, culminating in a promotion to a manager position in less than three years. During his tenure, his primary goals were to reduce manufacturing costs and improve yields by modifying or inventing new processes. One such change ultimately saved the company $50,000 in annual material costs. He also developed excellent professional relationships with his team and effectively communicated across diverse levels of technological understanding to complete projects.

Outside of the professional arena, Michael enjoys expressing his competitive side by playing a wide variety of games with friends and colleagues, striving to be first but always learning from others to improve next time. He also likes to relieve stress by preparing and sharing the South African baked goods and desserts his parents cooked when he was young, sometimes sharing leftovers with his dog, Britta.
While pursuing a career in math education, Alec attended the 2015 Sloan Sports Analytics Conference. It was at this conference that he saw an opportunity to work in a field he’d long thought of as only a dream. The Sloan conference fueled a vision of how Alec could pursue his passion of helping people achieve their potential. Combining this passion with his dream of utilizing data to provide insights to improve human performance, he began a mission to pursue a career in analytics.

The summer following his Sloan realization, Alec served as a junior tournament coordinator with the Indiana Golf Foundation. While traveling around Indiana, he gained an understanding of how to approach problems with different communication strategies. Routinely dealing with junior golfers from age 8 to 18, he quickly learned how to communicate complex rules and decisions based solely on the individual’s needs. Throughout the 8-week internship, Alec developed friendships with his favorite junior golfers and their “entourages,” and enjoyed encouraging junior development in his favorite sport.

In 2016, Alec co-lead a group of 14 fraternity brothers for Bike4Alz, a non-profit established to continue the chapter’s signature cross-country bike ride committed to ending Alzheimer’s Disease. He managed the finances, organized fundraising events and lodging along the route from Seattle to Virginia Beach, and communicated with professionals and volunteers for the Alzheimer's Association. After the completion of the 3600-mile trek, the group donated $52,000 for research.

In his free time, Alec enjoys cycling, pickup basketball, and an early morning on the golf course. He loves watching Western Kentucky University football and Butler basketball with his family and friends. Alec continues to volunteer for Bike4Alz to search for ways to increase both awareness and donations to the cause.
Madeline A. Cambo

Hometown:  Rollinsford, New Hampshire  
Citizenship:  U.S.

EDUCATION

▷ North Carolina State University  
  Master of Microbial Biotechnology, 2016

▷ University of North Carolina at Wilmington  
  B.S., magna cum laude, Biology, 2011

▷ SAS Certified Base Programmer, 2017

Madeline is best known for her motivation, influence, and ability to get things done. During her tenure at GlaxoSmithKline she served as an integral part of the sample management team, maintaining over three million of their proprietary compounds. Her attention to detail and natural ability to discern patterns enabled her to thrive in this fast-paced environment, quickly leading to a role expansion, where she expedited the drug discovery process through assembling compound sets.

Taking the initiative when her father was diagnosed with terminal lung cancer, she served as liaison between the patient and clinical research team. Despite the sponsor’s selection criteria barring patient enrollment, Madeline sought out advice from subject matter experts and proposed alternative strategies. Ultimately her persistence paid off when, in an unprecedented event, the sponsor reversed their initial ruling, allowing her father to participate in the study. Within weeks of beginning treatment, full disease remission was achieved, compelling the FDA to grant breakthrough designation to the targeted therapy.

After witnessing firsthand the positive impact data-driven personalized medicine had on patient outcomes, Madeline was inspired to pursue graduate studies in analytics. She began to teach herself programming and subsequently pursued a data science internship at ScitoVation, a company specialized in cell-based and computational methods. Leveraging her newly-acquired technical skills, she coupled her life science background with multiple programming languages to develop an automated data analysis pipeline for processing their legacy data.
Victoria Carneal

Hometown: Newport News, Virginia
Citizenship: U.S.

EDUCATION

- Virginia Tech
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Victoria became interested in analytics during high school while taking a college-level statistics course. During her time at Virginia Tech, she was inspired by the creativity required to make informed decisions and produce high-quality work at a datathon, and her tenacity led her to complete two actuarial exams. Working closely with a wide variety of teams, from engineering students developing better surgical methods to professors creating practice AP exams at local high schools, she developed a passion for data-driven decision-making and its wide variety of applications.

Since the age of 10, community service has always been a huge part of her life. She has mentored youth in her hometown, supported migrant workers on the eastern shore of Virginia, and tutored underprivileged children near her college. While working to predict U.S. prison population rates for a time series course, Victoria began to see how data analytics could be applied to a variety of social issues. This experience brought her full circle; she found that her passion lies in using data-driven decision-making to better her community.

Victoria enjoys traveling. Although Las Vegas, Nevada has been her farthest destination to date, she intends to travel to Greece and South Africa as soon as she can to visit the beautiful beaches. Being from the coast, she is inspired by the ocean and spends her summers as close to the shore as possible. Her ideal day is spent paddle boarding, boogie boarding, or kayaking.
Ever since he was a child, Ben understood the importance of hard work, learning to thrive with his instincts and adjust to his surroundings. This foundation of high personal achievement and adaptability led Ben to seek excellence in every endeavor. From strengthening his talents in sports to receiving his Eagle Scout award, Ben dedicated his attention to understanding how to develop himself. Through this devotion Ben discovered analytics discerning that the best way to see growth is to measure it.

In 2011, Ben and his brother launched a local coffee shop in Raleigh, NC called Jubala. With determination and careful execution, Ben increased revenue 216% and net profits 411% over 4 years, ranking Jubala among the top 50 coffee shops in the U.S. according to Bon Appetit. Ben’s strong sense of leadership and vision allowed him to manage a staff of more than 40 employees serving two locations while generating up to $3 million dollars in revenue, annually.

A driving trait in Ben’s personality is his ability to influence people. With a desire to serve others and create lasting impressions, Ben partnered with 12 non-profits across the U.S., raising enough capital to build media platforms and create marketing tools showcasing these organizations. Ben’s networking skills also led him to explore new opportunities using analytics by working for a new home construction company to focus their efforts on adding clients and promoting their brand in the Real Estate industry. From these experiences, Ben witnessed the scope of solutions created by data-driven insights.

Outside of work, you can find Ben with his lovely wife, pursuing his second passion, health and fitness. Living by his motto, “to do good you have to feel good,” Ben stays active participating in CrossFit, reading books about leadership by Jocko Williams, and searching local restaurants for some great food.
David has always had a penchant for challenges requiring complex solutions. In college, David immersed himself in the most difficult major—biomedical engineering. For the next few years he thoroughly absorbed and employed knowledge from diverse subjects ranging from materials science to computer programming to biomechanics. In his final year, while working with a team to prototype a skin cancer detection system, David valued the experience of integrating engineering analysis, project management, and team collaboration.

He continued to pursue analogous experiences while working as an analyst at FedEx supporting a large ERP software rollout where his interest in data really kindled. David’s attendance at an Oracle Collaborate conference sparked a fascination with big data and analytics, which drove him to consider how his team could better grasp FedEx’s accounting month end close process performance. Newly motivated, David took the initiative to learn new skillsets and rewrite SQL queries to analyze the available data. He spearheaded the enhancement of a custom Excel report resulting in improved visualizations that provided a clearer story of month end close performance. This experience led to a pursuit of greater in-depth knowledge in understanding how to connect data through analytics.

David relishes the opportunity to travel with his wife, having most recently hiked the picturesque Kalalau Trail in Kauai and driven along the scenic road to Hana in Maui. At home, David finds tremendous fulfillment in being able to provide mentorship to young people at his church.
Alex Christian

Hometown: Raleigh, North Carolina
Citizenship: U.S.

EDUCATION

- Virginia Tech
  B.S., Industrial and Systems Engineering, 2014
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Alex started his professional career as an analyst and software developer on the Advanced Analytics team at Fidelity Investments. Highly motivated by the opportunity to work on interesting problems with cutting-edge technologies, Alex was constantly learning and growing. He initially had little programming experience and took it upon himself to spend his nights mastering a variety of programming languages out of the desire to bring more to the table for his teammates. Alex quickly became a primary contributor to a data preparation system on Hadoop, which was used daily by data scientists for data exploration, model building, and model scoring. He also had great success as the technical lead in the development of a job scheduler used for batch processing and helped strategize the group's migration from on-premises software to the cloud with Amazon Web Services.

Alex’s previous manager said of him, "His solutions are innovative and far beyond his years of experience. He's capable of solving problems on his own but also enjoys talking with others so that he can learn from them and come up with the best possible solution. He's always successful and never seems daunted by a challenge. If anything, he’s motivated by these challenges. Not only to overcome them but to master them."

Seeing the impact of his work on customer experience and revenue fueled the excitement Alex already had about the amazing opportunities he believes exist with data analytics. He's full of creative ideas, and he revels in getting others excited about them and seeing his ideas become a reality. On his last vacation, Alex went scuba diving at the Great Barrier Reef and climbed the Sydney Harbor Bridge. He has a season pass to Snowshoe Mountain, and this winter he will be going on as many ski trips as his busy schedule allows.
Some of Matt's favorite books use analytical investigation to explain seemingly inexplicable social phenomena—books like *Freakonomics*, *Tipping Point*, and *Gang Leader for a Day*. His desire to understand challenging patterns and complex problems helped direct his academic and professional career toward analytics. While studying complex quantitative methods, like advanced calculus and linear programming, Matt grew to appreciate statistical and mathematical theory. He desires to apply his classroom knowledge to improve the world like the authors that sparked his interest in analytics.

As an Eagle Scout, Matt values community service and engagement. While a senior leader in his Scout troop, Matt helped lead Touch a Truck, an annual fundraiser that donates tens of thousands of dollars to the UNC Hospital Children’s Promise Fund. At the University of North Carolina, he wanted to join his passion for analytics with his dedication to community service. The opportunity arose at the Marsico Lung Institute, where Matt collaborated with students and faculty at the UNC School of Medicine and UNC Mathematics Department to research complex fluid dynamics to better understand cystic fibrosis. Matt’s responsibilities involved patient data analysis, model building, and model validation. His primary project was understanding how various chemical treatments affect the fluid properties of mucus.

Outside of his time spent growing as a professional, Matt’s hunger for mastering mathematical concepts is matched only by his appetite for perfectly grilled chicken. He is a diehard Tarheel sports fan and enjoys sharing his food and experience with family and friends.
As early as age six, Jared could be found in a garage with nothing but a screwdriver—attempting to disassemble a broken ceiling fan to discover what made it tick. That curiosity and a passion for all things automotive, combined with the experience of riding motocross since he was three years old, led him to develop a love for tinkering on cars, motorcycles, and small engines. The thrill of discovering how things work is what led him to have an interest in psychology. He ultimately became a teaching assistant for a psychology research methods class, where he discovered how fascinating it could be to use statistics and analysis to discover the answers to questions.

Jared leads an active lifestyle, enjoying obstacle course races like Reebok Spartan, weightlifting, and hiking. In his time as a Boy Scout, he hiked the mountains of North Carolina and neighboring states as well as trekked more than 100 miles at Philmont Scout Ranch in New Mexico. He grew up training and competing in Taekwondo, eventually attaining the rank of 3rd degree black belt. His passion for Taekwondo led him to pursue a position as an instructor in the art for three years as well as to help organize and run the Powerade State Games in NC in 2013. Always one to pursue new experiences, Jared became a cheerleader for the University of North Carolina at Charlotte in his senior year. The experience allowed him to combine his gymnastics skills with the thrill of new challenges.

Jared has traveled to parts of Europe, Puerto Rico, and studied Spanish in Costa Rica for a summer; however, he wants to explore more of the world and the cultures in it, both domestically and abroad.
A career spanning both the technical and public service sides of meteorology led Shawna to discover a passion for using data to provide insights to technical and non-technical audiences. Initially working with IBM contractors on weather forecast model code in a supercomputing environment helped Shawna to develop her coding skills and project management experience, leading her to attain PMP certification. While working as a weather forecaster, Shawna gravitated toward projects where she could use programming to analyze data, such as creating data quality control tools and improving analyses used for low temperature forecasting. Recognized throughout her career as a quick study with a willingness to take on new projects, she received annual individual awards for her work at her local offices. After these experiences, the desire to utilize programming skills and data analysis full time led her to pursue a career in analytics.

In her spare time, Shawna enjoys watching her hometown sports teams and taking walks through one of the many area parks, including Lake Johnson and Bass Lake. A lifelong reader, she enjoys a range of non-fiction topics, as well as fiction, particularly mysteries and thrillers.
Known by his peers as a critical thinker, Logan has a knack for challenging ordinary business processes to constantly innovate. He thrives in a business environment that requires him to think outside of the box, test the norm, and utilize cutting edge technology to solve challenges and address opportunities. Looking to be heavily involved in overall business strategy, Logan became a Market Development and Insights analyst at IBM. He advised senior leaders on topics such as start-up acquisition targets, competitive threats, emerging technologies, and the buyer’s journey. One of his biggest accomplishments was identifying an emerging trend affecting the systems services business line that led to an acquisition of a leading start-up. At IBM, Logan learned the power that actionable data insights can have on an organization, and he became invested in developing his quantitative data analysis expertise.

Logan embraces the opportunity of leading others and defines his success by the success of those around him. Identified as a natural leader early in his undergraduate career, Logan was selected as one of 10 students in the business school to become a Chapman Scholar—a three-year leadership development program. Throughout these studies, Logan had the opportunity to lead various student organizations on campus, including hosting a student-run philanthropy which brought more than 100 underprivileged children to campus for a holiday festival. He continued his pursuit of leadership at IBM where he led numerous professional development activities such as proctoring executive round tables.

Every autumn morning, he can be found watching SportsCenter where he eagerly awaits his beloved Clemson football highlights. To unwind, he enjoys going to Lake Tillery, waterskiing, wakeboarding, and paddleboarding the summer days away.
Barrett’s mother claims that he was born inquisitive. At a young age, Barrett developed a keen sense of wonder that compelled him to learn as much as possible about the world around him. As an undergraduate, Barrett found it impossible to limit himself to just one field of study. His passion for understanding numbers led him into the world of marketing research, while his passion for people led him into the world of sociology. But it was not until taking a data mining course his sophomore year of college that Barrett finally found a meaningful way to combine all his passions into one field of study.

Analytics is more than just theory for Barrett. It is a practical way to solve problems. During his marketing internship at his university’s cafeteria, he used analytics to measure food waste and student’s perception of their dining experience, which helped the cafeteria reduce costs and cut down on waste. Throughout his professional career and time as a student, Barrett led multiple research projects that spanned the fields of economics, sociology, gerontology, marketing, and politics, and he has presented his research at three regional conferences. He has won numerous awards at research festivals, including “best presentation in the social sciences.”

Barrett’s passion while presenting and in-depth understanding of complex material make him stand out as an analyst.

When he is not working with numbers, Barrett enjoys reading fantasy novels and philosophy. Barrett has hiked over 300 miles of the Appalachian Trail with his younger brother, and he often spends his weekends camping.
Though Nick began his education studying economics, he quickly discovered how powerful the world of analytics could be through a class analysis project seeking to explain the sales of NFL tickets using metropolitan demographics. This project not only sparked an interest in the intersection between economics and statistics, but also showed Nick the possible real-world application to topics and hobbies he felt passionate about.

Nick continued developing a strong interest in statistics and analytics by working with the Cline Center for Democracy, a political science research organization affiliated with the University of Illinois. There, he experienced firsthand how impactful data science could be in real-world applications while investigating political unrest. In one project, Nick used time series modeling techniques to find meaningful relationships between terrorist activity and other relevant information, such as refugee migration patterns and political unrest metrics. Using these same unrest metrics, along with state economic data, Nick also helped the Center predict national political unrest. These projects allowed him to hone his data science skills while gaining an even larger appreciation for the practical application of data science. Nick transferred this passion for statistics to teaching, by working within his department to assist in instructing courses featuring R and introductory statistics to fellow undergraduates.

When not immersed in the world of data, Nick can be found watching the Green Bay Packers beat the Chicago Bears each season. He has also recently taken an interest in brewing his own beer, with his favorite brews being porters and stouts.
At the age of 17, Ashley joined a year-long foreign exchange program in Belgium, an unprecedented undertaking in her hometown, where her graduating class was just 57 students. Her time abroad consisted of new challenges and adventures, which included giving presentations in French, having conversations with preschoolers about being an American, and even learning to ski for the first time in the French Alps. The experiences she had while living away from home ultimately led to a greater appreciation for the growth associated with novel experiences. Living fully-immersed in a foreign language and culture continually tested her limits and forced her to expand her comfort zone to develop a mindset that Ashley has challenged herself to apply towards every aspect of her life moving forward.

While studying statistics, Ashley was elated to learn that her love of foreign language applied to computer programming as well. The syntax in building a sentence in human language translated well to writing statements of computer code. As she learned more big data and statistical programming, her fascination with analytics and aspiration to improve her coding skills flourished. Using these skills and her eagerness to work with others, she became a peer tutor in Base SAS programming for NC State’s Department of Statistics. Working as a peer tutor gave her the opportunity to share her passion for data science, to encourage others to embrace unfamiliarity, and to get students excited about learning to code.

In her spare time, Ashley enjoys discovering the best coffee shops in new cities. She aspires to visit at least one new country each year and dreams of one day seeing a giraffe in the savannas of Africa. During summers home in the Adirondack Mountains, she spends days cliff diving with her twin brother. She naturally reverts back to her fear of heights, so each time she must repeat an exhilarating leap of faith.
Adam Crouch

Hometown: Chapel Hill, North Carolina
Citizenship: U.S.

EDUCATION

- Elon University
  B.S., *cum laude*, Environmental Studies; Economics, 2012
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Adam is devoted to understanding the connection between humans and their environment. From his time teaching English in South Korea to working with fishery economies in Turks and Caicos, he has developed a passion for exploring cultural and socioeconomic patterns. These experiences have shaped Adam’s belief that although stories are captivating, the backbone of every pattern is made of details and data.

With his environmental economics background, Adam began to see the power of advanced analytics through agricultural optimization models he produced at RTI International. Adam found himself drawn to the most intricate pieces of these models such as international trade patterns and regional U.S. bioenergy production. Exploring these optimization models often pushed Adam to develop his programming and visualization skills to reach meaningful resolutions. Adam’s commitment to economic modeling provided him with an opportunity to integrate two major bioenergy sector models and collaborate with resource economists across the country.

Adam is an adaptable individual who enjoys meeting new people and experiencing the world firsthand. Whether he is navigating language barriers in a different country or scuba diving with old friends, he values relationships created through travel. When he is not on the move, Adam enjoys breaking down sports statistics and playing the guitar or mandolin. He is looking forward to keeping his fantasy football win streak alive using advanced analytics.
Data is beautiful and can sometimes be dangerous. Intrigued by such characteristics of data, David has long practiced communicating with data to understand its innermost world. The past seven years studying math and statistics at top academic institutes in the U.S., such as University of Illinois in Urbana-Champaign and University of Virginia, has instilled in David a strong foundation of interpreting numbers. Upon graduation, he decided to continue his journey in pursuing data analytics techniques to become a comprehensive data scientist.

From writing the business plan for a successful education consulting group, to working as a lab assistant helping a local hospital diagnose early-stage sepsis patients, David demonstrated his leadership and passion in data analytics in various fields. His enthusiasm for data-driven business strategy motivated him to transition into data analytics sectors, in which he had the opportunities to work on and contribute to several data-driven projects, such as detecting anomalous credit card transactions and predicting customer subscription preference. Prior to joining the MSA program, David received a Data Scientist Certification from NYC Data Science Academy where he was immersed in data strategy and hands-on expertise with a data scientist’s toolbox.

Besides mining information from data, David also mines delights from personal life. He enjoys playing the classic piano and practicing culinary skills, and he also has a love for nature and outdoor activities, especially playing tennis, hiking, and scuba diving. David has visited more than 20 countries in the world and 35 states in the U.S., and he hopes to pin many more places on his map soon.
Kimberly Davis

Hometown: Raleigh, North Carolina
Citizenship: U.S.

EDUCATION

- University of North Carolina at Chapel Hill
  M.A., Political Science, 2011
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

“Most Improved” describes Kimberly Davis, having been awarded the team accolade twice in four years as a part of the UNC Varsity Swim Team. Identifying challenges and constant improvement continues to reflect how she pursues her academic and professional career. Analytics is her new challenge, which links together components from her social science academic career and consulting background. Kimberly started her six-year career in management consulting, after an internship at RTI International highlighted the benefits of exposure to a wide range of industries and addressing challenging problems. As a project manager, Kimberly learned the importance of collaboration with project team members and mastered the challenge of adapting to new clients and industries quickly. While working on a consulting project to forecast investor-owned utility distribution spend, Kimberly identified an interest in modeling and analytics. After additional projects working with seasoned veterans of IT infrastructure teams, Kimberly decided to deepen her technical skills, focus on the challenge of analytics, and pursue a future in data science.

Wanting to push herself further after completing her undergraduate degree, Kimberly was drawn to the Trans-Atlantic Master’s program in large part due to the challenge of writing her thesis abroad and working with an international cohort. These days, Kimberly continues to seek new adventures with trips to Peru, France, and Vietnam. Kimberly also enjoys local trips around North Carolina so she can bring her dog, Parker, along for a hike in the mountains. When Kimberly is not working or travelling, she enjoys taking long walks with Parker and listening to her favorite podcast, Radiolab.
A native of rural West Virginia, Tyler strives to help the less-fortunate overcome the challenges they face in post-secondary education. Over a year ago, he became inspired to volunteer for a National Science Foundation initiative known as NSF INCLUDES. The national initiative aims to enhance U.S. leadership and participation in STEM with a focus on the inclusion of underrepresented communities. Tyler is enthusiastic that the skills gained from the Institute will allow him to support this initiative even further.

Sports have largely driven Tyler’s interest in analytics. ESPN was a mainstay in his home as a child and it didn’t take long for him to become consumed by the data the network produces. While presenting mathematical research with his team at the Joint Math Meetings in Atlanta last January, he attended presentations that explored the use of statistics in determining the fairness of the NFL overtime rule and forecasting the NCAA Men’s Basketball Tournament. Over the years, Tyler has developed a curiosity of how analytics can improve the decision-making of sports organizations.

Tyler enjoys a variety of activities in his free time. Playing basketball, watching Game of Thrones, reading articles from FiveThirtyEight, and spending time with his friends and family are among his favorite. Lucky enough to call the wild and wonderful state of West Virginia his home, he explores its vast beauty anytime he can. Whether it’s snowboarding at Snowshoe Mountain or whitewater rafting in the Gauley River, Tyler is always ready for an adventure.
Valerie Davis

Hometown: Smithfield, North Carolina
Citizenship: U.S.

EDUCATION

- University of North Carolina at Chapel Hill
  B.S., with Distinction, Mathematical Decision Sciences, 2017
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Valerie’s professional goal is to spend her time solving puzzles—or as some call them, problems. Since grade school, she has been playing strategy games, ranging from classics like Connect 4 to card games like Spades and Magic: The Gathering, and eventually growing into complex board games like El Grande, 7 Wonders, and Puerto Rico. She loves exploring each game’s unique mechanisms and gauging the limitations and opportunities they create. Analytics itself is an intricate and fascinating game and it’s exactly the kind she likes to play. Although the rules aren’t always clear-cut and there may be multiple ways to succeed, she enjoys the game of figuring out the next best move.

Since her first international trip to Argentina when she was seven, Valerie has explored places and lifestyles that differ from her own background. However, knowledge of their existence is not sufficient, so she seeks out new experiences. She spent six months at King’s College London learning the computational side of artificial intelligence and user interfaces. Working with these concepts was new to her as was living alone overseas. Valerie wants to continue to expand her range of experience and since analytics is crucial in a variety of industries, she will have many opportunities to do so.

Valerie takes advantage of her downtime with good food and dancing. A declared foodie, she strives to find the best restaurants, markets, dishes, and drinks wherever she goes. On weekends she enjoys experimenting with new recipes and cooking methods at home. Weekends also include swing dancing; Valerie thrives on the energy of a room packed with dancers and a live traditional jazz band. Whenever possible, she attends dance exchanges along the east coast to take workshops and, of course, to try the local food.
Nicole Dhruv

Hometown: Malden, Massachusetts
Citizenship: U.S.

EDUCATION

- Hampshire College
  B.A., Biology, 2013
- SAS Certified Base Programmer, 2017

Nicole has always had a fascination with the many mechanisms at work to make life possible. As the daughter of an engineer, she developed a keen eye as to how multiple pieces work together to function as a larger whole. In her spare time she creates contraptions with complex designs that accomplish simple tasks. Her most complicated machine can light a candle through a series of Hot Wheels racetracks, marble mazes, pulleys, and levers. Nicole’s mind functions mechanically, while simultaneously is full of empathetic nature always fighting to be at the forefront. Every mental mechanical endeavor balances with the desire to connect it to the human experience: life.

Nicole’s inquisitive nature is one that is easily seen at first glance. Colleagues say she provides a combination of unique perspectives and critical analyses, often finding her inquiring: “Everything is connected; but how? What does this mean?” This nature was specifically noted during collaborative project work at Hampshire College. By integrating two strands of research in the biological and psychological sciences, Nicole created a study highlighting connections among genetics, cortisol, autobiographical memory, and depression. She managed six assistants for two years in the cognitive development and molecular biology laboratories. She also executed all components of methodology and analysis for her thesis work.

Upon graduation, she worked in the Developmental Neuropharmacology Lab at Harvard Medical School. Due to her desire for more exposure to data analysis, she worked in data management for a Vanderbilt University research facility specializing in speech intervention for children with Autism Spectrum Disorder (ASD). Both experiences had one aspect in common that fascinated Nicole: data and its practical use in the human experience. At this point in Nicole’s academic and professional trajectory, she discovered that her passion is centric to creating a macro-narrative that brings disparate pieces of data and analysis together.
Growing up on a potato farm in Idaho, Darin learned the value of hard work, leadership, and the joy of discovering innovative solutions. Darin enthralls in embarking upon backpacking trips that explore unnamed trails and lead to the discovery of unknown routes and landmarks. He approaches business with the same passion and mindset, searching for ingenious and unexplored solutions to multifaceted problems.

Hard work and leadership have become themes for Darin’s work experience. As an undergraduate at Brigham Young University, Darin was elected by 20 of his peers to be the CEO of a quick serve eatery. Under Darin’s leadership, the company grew to become the second, most profitable business in the university’s history, and the only business to be acquired by the institution.

Using this experience as a model for his future, Darin went on to play a key role within a four-man team, launching the most funded crowd-sourced campaign in Utah history. His passion for business and cutting-edge solutions inspired his idea to create a diaper bag targeted at dads. From there, Darin designed a product, co-founded a company, and licensed the product to a designer diaper bag company.

Through these varied experiences, Darin has come to understand that comprehensive and undiscovered solutions almost always lie within data. The desire to uncover and apply the solution that will enhance business decisions and operations is the driving force of Darin’s desire to pursue a career in the data analytics field.
Reading books at the age of three and transposing music by ear at the age of five, John eagerly takes every opportunity to learn something valuable. Whether the idea relates to the human experience, technology, art, or beauty, John must understand it and be involved with it. This internal drive led John to teach himself five instruments, create an original method to teach music theory, join a CrossFit gym, teach parkour, play a video game competitively, and travel to more than 18 countries.

During his undergraduate studies John used the visual programming language MAX MSP to create a piece of computer-generated music with no melody or rhythm. The piece never played the same way twice. For his senior project, John created a unique method of scoring soundtracks for videogames. John wrote, recorded, and applied original music and effects to a game. He enjoyed overcoming the challenges in order to make his vision for a more immersive player experience a reality.

John’s desire to leverage technology and creativity and to communicate ideas led him from an undergraduate degree in arts and technology to a technical leadership position at a non-profit organization to an advanced degree in analytics. John interned with a data science consulting firm in 2013 and quickly became excited about the many applications of analytics, particularly in healthcare and public policy. John wishes to design analytics projects to increase the accuracy of disease diagnostics and the effectiveness of government programs.

John’s mentors consistently praise his ability to communicate complex ideas clearly, as well as his willingness to learn quickly by seeking constructive feedback. John’s varied education brings a fresh and valuable perspective to the field of analytics, mixing experience in leadership, performance, project design and execution, and the arts with traditional studies in statistics and programming.
Over the past decade, Mariam has been enriching her statistical knowledge by completing an undergraduate multidisciplinary bachelor degree with a major in statistics (accompanied by economics, finance, and political-science classes) followed by post-graduate courses in statistics. She excels in subjects that require understanding, problem-solving, and critical thinking. In addition, her career as a teaching assistant for business students developed Mariam into a well-rounded analyst who has both advanced statistical technical skills and solid business understanding.

Mariam applies the tools she learned with her students. She spent hours with students and colleagues breaking down business problems and combing through data, so that the goal is achieved with a unique deliverable. Mariam is well-known among coworkers for being a skilled statistician who is devoted to conveying her knowledge to anyone in need.

Being a zealous reader, since childhood, is what sparked Mariam’s interest in analytics. Mariam enjoys discovering what is new in the statistics, finance, and business worlds. Mariam loves to travel and has studied abroad in several countries—Germany, Tunisia, and the U.S. She is enthusiastic about discovering other cultures. Over the years, her international experiences taught her to deal with differences easily, which makes her a very effective team player.
In the face of a chaotic world, Shaun uses logic to organize, simplify, and understand problems. This knack for logical thinking and a capacity for creative problem-solving led Shaun to study computer science at NC State. Furthermore, a love for numbers and quantifying the unknown drew him to statistics as a second major. Shaun sees data analytics as the natural intersection of these two disciplines and is committed to applying his expertise in the service of others.

During his undergraduate education, Shaun had a myriad of meaningful extracurricular and work experiences. He worked full time for IBM using Java to create automation software for testing web pages, allowing him to hone his programming skills. Shaun also worked as a lab instructor, giving lectures to engineering students on technology basics from Excel to HTML. As Webmaster for the Caldwell Fellows scholarship program at NC State, Shaun managed the application database and interfaced with candidates and interviewers to ensure a smooth application process. This position required him to maintain integrity and strict confidentiality regarding sensitive personal data. While these experiences varied widely, common themes emerged. Shaun found his passions in programming, managing data, and helping others, and he is excited to bring these passions to a career in data analytics.

Beyond academia, Shaun enjoys all kinds of exercise from weight lifting to running. He is also an avid soccer fan, following the sport both domestically and abroad. Before beginning his graduate studies, Shaun hiked over 300 miles of the Camino de Santiago in Spain.
Do you think it would be fun to race across a lake in a handmade concrete canoe? Carrie did just that during her time as an officer for Auburn’s chapter of the American Society of Civil Engineers. By exploring concrete mixes, designing the boat’s shape, constructing the formwork, placing the concrete, and racing the finished canoes, the engineering process further cultivated Carrie’s passion for problem solving. Out of the desire to share her passion, Carrie became involved in a variety of outreach activities that focused on inspiring children’s interest in engineering. She participated in events ranging from leading educational booths at elementary school science nights to providing lab tours to high school students. Her personal favorite was “Concrete for Kids” where, with her guidance, teams of middle school students constructed their own concrete beams and competed to see whose could hold the heaviest load.

After completing research projects focused on concrete bridges at both Auburn and Virginia Tech, Carrie worked as a design engineer for a bridge construction company. There, she implemented a new project tracking system that updated the way the company discovered future project opportunities. Instead of becoming aware of possible projects through word of mouth, the new tracking system aggregated potential projects and filtered the best opportunities for the company based upon profitability and company goals. Carrie was inspired to study analytics after seeing the amount of data her company had access to, but was severely underutilizing. She aims to use this education to hone her skills to help provide qualitative solutions through quantitative data analytics.
Raised in the one-stoplight town of Bahama, North Carolina, Keith has always been driven by curiosity, challenges, and a strong desire to understand how things work. From disassembling his ink pens in class or working on his dirt bike after school, he constantly filled his toolbox with problem-solving skills, which inspired his innovation.

Growing up loving many sports, Keith’s passion lay in motocross racing. After being sidelined by a nerve injury at 16, his resilience and desire to stay involved in the sport led to his first mechanic job. His diligent work ethic and positive attitude earned him a spot at MTF, the top motocross training facility in the world, where his toolbox grew from being a mechanic into also being a mentor and motivational coach to amateur and professional racers. Keith then had an opportunity to be the Team USA Amateur Motocross lead technician in France, where he supported a team of kids from 5-18 years of age, and helped them win a World Championship. Soon after, Keith was invited to move to Australia for an internship with the owner and managing director of WEM–Rockstar Energy Motocross Nationals, where he learned the logistics of running a business on a national level. There he recognized the exciting power of data, which sparked his interest in creating pragmatic solutions through data analytics.

Keith also loves the outdoors, which is why he volunteers every year to work alongside members of Ducks Unlimited to restore and conserve wetland habitats. Keith’s diverse experiences have helped broaden his ability to see unique solutions to problems. The MSA program has upgraded his toolbox, by giving him a new set of analytics skills, while fine-tuning existing skills such as leadership and problem-solving—all of which he is eager to apply in his next endeavor.
Danny has always enjoyed and excelled at math, but he didn't always know how he wanted to apply it. As a sophomore at Notre Dame, he applied for internships in a variety of fields, eventually accepting a position as a Research Assistant at the Wilson Sheehan Lab for Economic Opportunities (LEO). During his first summer at LEO, Danny worked with the Juvenile Justice Center in South Bend, Indiana to help them develop a new Detention Risk Assessment Instrument. Analyzing more than 30 years of data, he helped them determine what the biggest predictors of re-arrest were, allowing them to more accurately identify high-risk teenagers.

Danny continued his research at LEO for a second summer. He received an Undergraduate Research Opportunity Program grant to fund his research with Economics Department Chair, Bill Evans. The two analyzed refugees’ long-term economic outcomes using census data, culminating in a co-authored paper, “The Economic and Social Outcomes of Refugees in the United States: Evidence from the ACS.” The paper generated a lot of buzz when it was released as a working paper in June. The Washington Post, Business Insider, and FiveThirtyEight featured it in articles, and the National Bureau of Economic Research highlighted the paper in its monthly digest. While Danny thoroughly enjoyed his time working at LEO, he recognized that it was the data analysis, not the economic theory, that intrigued him.

Danny spends a large portion of his free time playing ultimate frisbee. Despite being a novice when he picked up the sport as a freshman at Notre Dame, he was elected a captain of the team for his senior year. He planned and led practices, chose the team roster, and organized logistics for the team’s tournaments in locations such as Charlotte, Tallahassee, Chicago, and St. Louis.
Trained as an Industrial Engineer, Jennifer applies the principle of continuous improvement both personally and professionally as she strives to learn and grow each day. Her consistent work ethic and love of learning about challenges in the modern business climate led her to be honored with NC State’s Outstanding Senior in Industrial Engineering Award.

Jennifer’s problem-solving skills and interest in organizational strategy converged into her pursuit of a career in analytics. She utilized problem-solving frameworks in her internships at Duke Energy, where she analyzed the flow of warehousing and supply chain processes at one of the country’s premier nuclear power plants. Her work resulted in potential savings of over one million dollars.

Awarded the Park Scholarship as an undergraduate at NC State, Jennifer has interacted with influential leaders in both the public and private sectors, learning about solving problems that affect business organizations and communities. These professional and scholastic experiences inspired Jennifer to join the field of analytics, which presents exciting opportunities to use data science and leadership skills to combat challenges that affect business and society.

Jennifer spends her free time watching sunsets on Lake Norman in the summer and cheering on Cam Newton and the Carolina Panthers in the fall. She also loves reading long-form journalism and suspense novels. Jennifer is passionate about making a positive impact in the community and has participated in several domestic and international mission efforts through the United Methodist Church.
Kathryn has a love for problem-solving and a mind for creativity. Her internship with Selective Insurance introduced her to the world of analytics, a world where she is able to combine her enthusiasm for innovative problem-solving and analytical adeptness. Using predictive modeling techniques, her team was able to aid in data-based decision-making and save the company thousands of dollars. She felt excited and empowered when realizing how many challenging and pivotal questions can be tackled with data-driven insights.

After starting her career at Deloitte Consulting, Kathryn discovered her true talent: using data analysis to translate clients’ complex business problems into actionable insights. Kathryn embraces challenges. The past few years have given her an incredible opportunity to use data analytics to solve some of our nation’s most pressing homeland security challenges. Her team relied on Kathryn’s out-of-the-box thinking to be the first team to model and quantify security effectiveness for a Department of Homeland Security (DHS) agency, allowing DHS to more effectively carry out its mission. Kathryn’s positive attitude towards learning and challenging herself enabled her to develop strong leadership, communication, and client relationship skills. During her time at Deloitte, she was known for her ability to present complex information through creative visualizations to executive-level clients. These experiences reinforced her passion for helping clients draw deeper, data-driven insights to achieve their missions. Kathryn was selected for more senior roles and received several awards recognizing her exemplary performance.

Kathryn attributes part of her success to the foundation of self-motivation and team collaboration she learned while playing soccer. She can also be found cycling on greenways around Raleigh to explore new areas or channeling her creativity through acrylic painting.
Joshua Gandy

Hometown: Apex, North Carolina
Citizenship: U.S.

EDUCATION

- North Carolina State University
  B.S., *cum laude*, Business Administration, 2017
- SAS Certified Base Programmer, 2017

As a collegiate hurdler, the art of overcoming obstacles has deepened Joshua’s appreciation for solving problems which led him to take that big leap from sports to data analysis. Joshua appreciates the challenge, analyzes the obstacle, and executes the solution with precision. This approach to solving and analyzing challenging problems was developed over his years as a student athlete.

When not hurdling over barriers on the track, Joshua found ways to collect and analyze information to make it valuable for company teams through his internship and practicum projects. As a marketing intern at Cisco, he had the opportunity to track and monitor customer engagement. He was then able to utilize the data to aid teams’ efforts to drive engagement to the company’s website, increase interaction on social media pages, and aid in the enhancement and development for the company’s marketing campaign.

During his senior year of college, he had the opportunity to participate in two practicum projects. The First Citizen’s Bank Practicum project allowed him to utilize Excel and SAS JMP to conduct data analyses. The Google Analytics Practicum project allowed him to conduct market analysis for his client Jim Blackburn Seminars LLC. He and his team utilized Google Ad Words and Google Analytics to optimize the inbound traffic that was interacting with the ad they created for the company.

Although he is officially retired from Division 1 athletics, Joshua’s next physical challenge is training for and competing in an Iron Man. In his free time, Joshua enjoys cooking, traveling to new destinations, reading motivational and leadership books, and spending time with his family. He also enjoys giving back to his community, specifically mentoring younger children and peers.
Caroline’s knack for deconstructing large projects into manageable tasks was apparent at an early age. While her peers reveled in high school homecoming festivities, she ardently orchestrated the design and construction of homecoming parade floats in her backyard, ensuring every last decoration, prop, and costume feature fell into place by the parade morning. This methodical mindset and passion for mobilizing people and resources continued to earn her recognition as both a resident and conference advisor at UNC Chapel Hill. In these roles, her peers awarded her the “RA’s RA” award for her consistent energy, reliability, and leadership while the Director of Conference Operations called upon her to help revise best practices for campus-wide conference office operations.

Caroline’s enthusiasm for solving problems that impact people underpins her diverse background in student affairs, hospitality, recruiting, and digital marketing. Invigorated by new challenges and learning opportunities, Caroline sparked an interest in analytics while working as a digital content coordinator at a growing ecommerce startup. There, she combined her eagerness to learn and coordination skills to successfully lead a 1500-page content migration and improve search engine traffic by 20%. After utilizing Google Analytics to prioritize which pages to optimize, Caroline realized these efforts only scratched the surface of the impact of data. She decided to pursue graduate studies in analytics upon recognizing the opportunity to expand her knowledge and combine it with her eagerness to solve problems.

Outside of class, Caroline is rarely idle. Her visit to the Great Smoky Mountains last June was the first check on her National Parks bucket list. If not building her grip-strength while climbing at Triangle Rock Club, she can be found crafting her latest DIY project or exploring the Triangle’s running greenways, propelled by show tunes from the “Wicked” cast recording, of course.
Sanya Goyal

Hometown: New Delhi, India
Languages: English, Hindi
Citizenship: India

EDUCATION

- Symbiosis International University
  M.S., Economics, 2015
- Delhi University
  B.A.(Honors), Economics, 2015
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

After handling various advanced analytics projects as a Data Scientist at Bristlecone, Sanya has come to believe that people are the focus of every worthy endeavor—whether it is automating business processes to make people’s lives simpler, performing sentiment analysis to understand customer preferences, or helping companies reduce their carbon footprints to make the planet more sustainable for everyone. At the heart of it all, she feels that there is a genuine desire to help people live better.

This belief became stronger when she helped a major FMCG company fulfill its role in the society by moving towards a greener manufacturing process. The company owns 33 ice-cream factories across the globe and was struggling to identify the reasons behind high and varying levels of energy consumption among these factories. Sanya first tried to understand on-the-ground realities of operations that impact energy use, and then applied her programming skills to quantify the incremental impact of the drivers of energy consumption. By using multivariate models, she also determined energy consumption thresholds for each of these 33 ice-cream factories. This analysis helped the FMCG company reduce their energy consumption to produce ice-cream in an environment-friendly way. It gave Sanya a taste of the power of advanced analytics to solve complex business problems while having a positive societal impact.

She is naturally inclined towards left-brain thinking, but keeps her right brain active by performing as a vocalist with local bands, singing Adele’s songs with a fusion twist.
Growing up, Chris did well in most school subjects, but math was always his favorite due to the logic and problem-solving mindset it required. When it was time to choose a major at UNC Chapel Hill, Chris decided on mathematics and biostatistics as he was curious how his quantitative skills could be put to use in the field of public health. An avid sports fan since his youth, Chris was also interested in how math could be used in sports particularly after reading Moneyball: The Art of Winning an Unfair Game by Michael Lewis. At the 2015 SPEIA Basketball Analytics Summit, Chris’ group was one of five selected to present their submission to a case competition in front of sports analytics professionals from all over the country. Getting input and advice from these professionals was an invaluable learning experience. Since then, Chris has continued to work independently on sports analytics projects.

After graduation, Chris worked as a contractor for the U.S. Environmental Protection Agency (EPA) analyzing high-throughput toxicology data with R programming. Collaboration with a post-doc there yielded a 2nd author published paper exploring the use of a new metric called Normalized Multiinformation (NMI) to measure the effect of drugs and chemicals on in-vitro neural network activity. During his time at the EPA, Chris was exposed to several machine learning algorithms used to find patterns in data; as a result, the experience prompted him to return to school to learn more about analytics.

In his free time, Chris can most likely be found playing pick-up basketball or beating his friends and family in fantasy football. He also enjoys watching television shows such as Game of Thrones and Vikings.
Veer took interest in analytics when he realized how Amazon was draining his bank account by suggesting products (especially clothes) that he could not resist buying. He started understanding the power of analytics to better connect companies to their target consumers. A freshman at the time, Veer decided to learn a little more about the basics of the field by taking courses in statistics. He was amazed to learn how powerful a tool it was to better understand data, inspiring him to declare his major as statistics and machine learning.

As an undergraduate, Veer constantly collaborated on various projects with his professors, the most notable ones being predicting economic mobility and understanding tobacco use among youth. Veer was also the only undergraduate chosen to intern with the video analytics team of a large, big data company: Mu Sigma. There, he worked with a Fortune 100 home improvement company as a client to help it track customers in stores. From this experience, Veer understood how analyzing customer behavior helps companies make better marketing decisions, further sparking his interest in analytics.

Outside of work, Veer loves traveling and has been to more than 40 countries—his favorite being Japan. Having served in various leadership roles, including a residential advisor and a teaching assistant, he is fortunate to have interacted with people from various backgrounds and cultures. This has fueled his aspiration of helping transform the world into a global village.
EmilyHadley

Hometown: Plainfield, New Hampshire
Citizenship: U.S.

EDUCATION

- Duke University
  B.S., Statistical Science; Highest Distinction in Public Policy Studies, 2015
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Emily's proudest accomplishments as an AmeriCorps college adviser in rural North Carolina were increasing college attendance by 25%, boosting scholarships by nearly $5 million, and helping six students from low-income backgrounds receive full rides to college. She utilized a data-driven revamp of standardized test preparation and a renewed focus on college and scholarship application completion to drive this change. As a result of her efforts, Emily was recognized as a Millennial Impact Fellow by the venture philanthropy fund New Profit and was invited to share her story on the mainstage at their 2017 gathering. Her work was also highlighted in the National section of the New York Times.

Emily developed her passion for data and policy at Duke University where, in addition to her undergraduate degree in statistics, she completed a major in public policy studies. In her senior thesis, Emily analyzed various models for predicting high school dropout among 50,000 rural North Carolina high school students and made policy suggestions to address the two strongest predictors of dropout, success in ninth grade math and regular attendance. She enjoyed the challenge of using complicated data to address a chronic policy issue from a fresh perspective and received Highest Distinction in Public Policy for her efforts.

While growing up on a small family farm in New Hampshire, Emily developed an appreciation for the natural world. She has particularly enjoyed backpacking trips including the White Mountains in New England and Half Dome in Yosemite. She also loves visiting museums, swimming in lakes, and keeping in touch with her former students on their college journeys.
Those who know Amy know she is passionate about linguistics. She not only loves learning languages—she is nearly fluent in French and minored in Arabic as an undergraduate—but also discovering patterns within language through data. In her master’s degree in linguistics at NC State, Amy analyzed American English acoustic data with R and obtained hands-on experience using sophisticated data analysis tools. After graduating, she used her knowledge of language as a computational linguist at LexisNexis. There, she used natural language processing techniques to teach computers how to understand patterns in human language. This experience was her first introduction to the broader field of data science.

After her contract with LexisNexis ended, Amy took time to focus on things that were important to her. She volunteered for WomenNC, a local women’s rights organization, and joined Girl Develop It, a nonprofit dedicated to helping women succeed in careers in STEM. She also took her budding interest in data science and channeled that into online coursework in statistics, Python, and machine learning. Amy gained an appreciation for the varied roles of the data scientist, who processes any and all data, whether it’s the text data of her computational linguist days or numeric data like the acoustic data from her graduate research.

Amy spends her free time continuing to support WomenNC, rock climbing with friends, teaching her nine-year-old niece Python, and spending time with her beloved pug, Betty. Her increased knowledge of AI has led her to appreciate certain types of automated art, such as the Twitterbots created by Darius Kazemi. Amy’s even tried her hand at AI art herself. She used a style transfer algorithm to create a picture of her native Detroit’s skyline in the style of Diego Rivera.

Amy Hemmeter

Hometown: Farmington Hills, Michigan
Citizenship: U.S.

EDUCATION

- North Carolina State University
  M.A., English, 2016

- University of Michigan at Ann Arbor

- SAS Certified Base Programmer, 2017
For as long as she and her family can remember, Liz has been focused on details that may improve a process or situation. To her parents' dismay she was constantly rearranging her room as a child, working within constraints in pursuit of the perfect space utilization. While Liz's continuous improvement-seeking nature did not benefit the furniture, it did lead her to engineering and has served her well in the workplace. She was first exposed to the sheer amount of information that is available, yet untapped, while interning in process engineering roles. From small businesses to global household names, she saw how little visibility manufacturers had on their processes and how much value it would add. The prospect of redeeming lost opportunities in data is what sparked her interest in analytics.

Upon graduation, Liz took a leap in both industry and location from manufacturing in the Southeast to IT consulting for an insurance client in New England. Working as a hybrid business and quality analyst on an agile project team, she found that shortcomings in data were not exclusive to any industry or application and realized that her interests truly lie in harnessing the rationality of numbers to gain insight into chaotic scenarios. Whether it's creating a new needlepoint belt or the best travel experience, Liz is driven by optimization outside of her professional life as well.

Liz thrives on staying active and seeking the unexplored. She loves the meticulous process of needlepointing and, after traveling in the Mediterranean and Europe, has turned her focus toward seeing what lies within the U.S. Some recent highlights have been biking throughout Portland, Oregon, hiking the Cholla trail in Arizona, and taking daytrips across New England. She can't wait to explore more.
Di Hu

Hometown: Chengdu, China
Languages: Mandarin
Citizenship: China

EDUCATION

- North Carolina State University
  M.S., Biological and Agricultural Engineering, 2012
- Sichuan University
  B.S., Chemical Engineering and Technology, 2010
- SAS Certified Advanced Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

A born extrovert, passionate communicator, and problem solver, Di enjoyed her previous three years as a consultant in a leading environmental consulting company, serving 37 clients from different industries on more than 300 projects. She provided timely and high-quality professional service on environmental permitting and compliance to her clients, and was a reliable source for solutions on environmental issues. In addition to consultancy, Di also performed business development activities, where she excelled at writing proposals and winning bids.

During her last master’s program, Di worked on modeling the dispersion of air pollutants. Through the collection and analysis of field data, she assessed and identified all the possible factors affecting pollutant emissions and dispersion, and then established experiment-based statistical dispersion models. Since her thesis project utilized intensive data processing and statistical modeling, Di motivated herself to learn SAS coding for developing statistical models. Over time, she has developed an interest and passion for analyzing and mining data to produce practical real-world answers for the grand challenges that we face today.

In her spare time, Di enjoys playing board games and rock climbing with friends. One of her favorite board games is Werewolf, in which she enjoys winning through careful observation, deduction, and persuasion. When Di is climbing, she thrives on the process of conquering her fear, persevering, and reaching new heights through practice and hard work.
As a passionate data analyst, Jiajing's deeply-rooted interest in data modeling, coding, and complex problem solving started from the Mathematical Contest in Modeling, in which she earned the Honorable Mention as a sophomore. With little experience in modeling, she managed to learn quickly and put new knowledge into use. As the team leader in that three-person team competition, she led the team in model building, communication, encouragement, as well as time and cost management. When building the optimal model to design a solar energy house in the competition, she realized the magic of data modeling and coding. Ever since, she looks to solve complex problems by using quantitative tools. Jiajing continued enhancing her data analytics skills in graduate school. As a finance student, she combined data science with finance in her thesis, which used time series models to analyze the half-second high frequency data on stock-index futures prices to do statistical arbitrage and earned an annual return of 4% with minimum risk. During the process, she enjoyed the power of being able to quantify and control the risk and was eager to solve more challenging problems with quantitative tools.

Aside from school, Jiajing proactively used her data analytics skill in her internship as a strategy analyst at Guotai Junan securities company. She used principal component analysis to simulate daily fund positions and predict future positions, which was used to guide the investment allocation among different industries.

Jiajing enjoys jogging around Lake Johnson every morning before class and swimming every evening after school. When running on the trail, she enjoys the peace of nature, as well as meeting different people.
Ned has always been curious and skeptical about the world, making sure to never assert something that is not backed by sound evidence. Surprisingly, he chose to study economics his sophomore year even though it is a discipline largely based in theory. Through the economics department he took his first econometrics course where he found the perfect combination of theory and evidence-based decision making. Econometrics was his first introduction into the awesome power of regression analysis and other advanced statistical methods, and he quickly immersed himself in the far-reaching application of statistics to all different types of problems. Specifically, Ned focused on applications to economic problems such as income-disparity and unemployment forecasting as well as non-economic topics, such as predicting energy-use in Boone, NC. This wide application of statistics satisfied Ned’s intellectual curiosity.

Some of the most important learning experiences for Ned have come from outside the classroom. For three years, Ned coached youth soccer in Boone, NC and became curious about communicating by using different learning styles and learning to clearly articulate complicated concepts. This was a meaningful experience for him as he strove to be a role model and help shape the children’s futures.

In his free time, Ned’s curiosity extends past his academic work and into topics such as space exploration and science. From this curiosity, he finds pleasure in reading science fiction and nonfiction topics such as physics, astronomy, and math. He always enjoys challenging himself, not only intellectually, but also physically. He is known to occasionally join a pick-up basketball game or find an opportunity to go skiing out West.
As a child, Jacqueline would never have imagined herself attending graduate school for a degree in advanced analytics. It was not until her microeconomics class as a freshman undergraduate at Appalachian State University that she realized her interest in understanding the motivation behind events. Since then, Jacqueline strove to increase her quantitative skills and abilities through classes such as game theory and statistics.

During an internship at the Museum of Life and Science, Jacqueline’s interest in data analysis was sparked. Throughout the internship she seized the opportunity to organize rentals data, making the information easier to use and interpret. Using Tableau, Jacqueline searched for patterns in the types of rentals, common add-ons for each type of rental, and when the reservations were made. With these patterns, the museum could better understand their rentals cycle. It was the first time that she gained a clear glimpse into how data is utilized to improve business operations.

Outside of schoolwork, planning the annual Appalachian State Fiddler’s Convention was Jacqueline’s greatest passion during her undergraduate career. This convention combined her love of the Appalachian culture and her knack for organizing and planning events. Other than listening to live music and purchasing homemade soaps, Jacqueline enjoys trips to the farmers market and re-reading the Harry Potter series.
Haani Husain

Hometown:  Appleton, Wisconsin
Citizenship:  U.S.

EDUCATION

- University of North Carolina at Chapel Hill
  B.A., Economics with minor in Mathematical Decision Sciences, 2017
- SAS Certified Base Programmer, 2017

Haani was introduced to the field of data analytics late in his college career when he set out to create UNC’s first competitive League of Legends team. League of Legends, the largest esport in the world, hosts a national collegiate tournament—the uLoL Campus Series—with over a million dollars in scholarship prizes. Through a network of friends, Haani managed to assemble a pool of skilled players. However, knowing talent alone would be insufficient, he trawled through hundreds of hours of gameplay footage. By using observations from past games and insights gleaned from professional play, he was able to develop strategies and team compositions to gain a competitive edge. Armed with these analyses, the fledgeling squad pushed to a Top 8 finish in the 2017 Campus Series—earning them $5,000 in scholarships.

Intrigued by the power of analysis, Haani went on to take classes in optimization and econometrics. Although it was too late to apply the principles he learned, they did serve to cement his desire to learn increasingly advanced analytical techniques. Since coming to the Institute, more tools are at his disposal with each passing day. Haani is eager to enter the world of data science and face ever new and increasingly difficult challenges.

In his free time, Haani is always looking to add to his list of hobbies, both on and offline. With an eclectic taste in music spanning from synthpop to indie folk, Haani will listen to anything once. As a competitive swimmer for five years, he still prefers his workouts in the water. At the library, Haani is usually drawn to the fantasies of Brandon Sanderson or R.A. Salvatore, although he also enjoys a good mystery.
Although he hasn’t used the laws of thermodynamics in a while, Idrees feels that his training as an engineer was invaluable. It taught him a framework to take on challenging, real-world problems and come up with viable solutions. From developing a team of autonomous soccer robots to building a wind tunnel, he thrived facing challenging projects of varying scope and domain.

At Afiniti Inc, USA, Idrees worked in the Artificial Intelligence team. His biggest responsibility was to build models using Bayesian statistics that strategically matched incoming calls to the agents in contact centers to maximize revenue and customer satisfaction. He was instrumental in bringing onboard one of the largest clients for the company, Virgin Media UK, which ultimately generated around $10 million annually. Although a project of this size brought about many constraints, Idrees was able to successfully collaborate with all internal and client-facing teams to ensure the project was able to meet its tight deadlines. The success of this project, along with his overall contributions, earned him the spot as the top performer on his team of over 40 other analysts.

At a young age, Idrees developed a strong desire to improve the world around him— particularly in areas that do not have many resources like his home country, Pakistan. In college, he led a month-long clothes donation drive to benefit a local orphanage. More recently, he served as a mentor to children in low-income schools located in impoverished areas and counseled them on how they could become self-reliant and break the cycle of poverty.
As a son of a mathematician, Namazbai has always been interested in mathematics and how it can be applied to solve real-world problems. Because of his passion for numbers, he applied to the Mathematical Methods in Economics program at Kyrgyz-Russian Slavic University, Kyrgyzstan. During his studies, Namazbai excelled in numerous courses such as multivariate statistics, optimal control theory, and econometrics.

After graduating, Namazbai joined the National Bank of the Kyrgyz Republic (Central Bank) where he enjoyed breaking down challenging problems. Working as a modeling expert in the economic department, Namazbai was responsible for assisting the Board of the Bank in making monetary policy decisions by building forecasting and explanatory models. In just three years he, in close collaboration with experts from Swiss National Bank, successfully built and implemented a structural macroeconomic model of national economy and stress-test model for the national banking sector. Namazbai then presented the macroeconomic model at the Central Bank’s conference in Zurich and published a paper discussing the stress-test model. He also contributed to implementing the Forecasting and Policy Analysis System (FPAS) in Central Bank’s framework. All models Namazbai worked on are used today and provide scenarios to the Monetary Policy committee and the Financial Stability department of the Central Bank.

In his spare time, Namazbai enjoys teaching, debating, and playing chess. He taught econometrics at International Ata-Turk Alatoo University, Kyrgyzstan, and lectured on regression for the staff of the Central Bank. Namazbai is also a two-time national champion in American parliamentary debates and vice-champion in a national TV-debate contest in British parliamentary format. When playing chess, Namazbai prefers strategic openings, and plans to become a Candidate Master in five years.
In Kindergarten, Jennifer challenged the status quo and improved an arts and crafts assignment. Instead of building one caterpillar, she worked harder and smarter to produce 10 while helping other students complete their own. Even at this young age, she displayed leadership and a desire to improve processes, and these qualities have remained constant over time and throughout diverse work experiences. Coupling this with her willingness to disrupt and her interest in analytical techniques led her to data-analytics, with the vision of providing strong leadership and data-driven recommendations to drive meaningful organizational change.

Jennifer cultivates a challenging and supportive environment for those around her. One memorable achievement was developing direct reports culminating in promotions for 12 people in two years. Representative of her robust work ethic, she earned a company award for her “Ability to Get Stuff Done” while at Relias Learning. Her hard-working nature, ability to confront challenges, and collaborative approach led to her position of Director of Operational Integration where she was responsible for integrating acquired companies into Sales, Client Care, Marketing, and Business Improvement departments while achieving key targets such as revenue growth.

To illustrate her commitment to excellence, Jennifer was a two-time ESPN The Magazine Academic All-American, excelling as a psychology student interested in childhood resilience while leading the soccer team as a team captain. During this time, she participated in the prestigious Honors Internship with the FBI where she assessed gang activity on the Yakama Indian Reservation.
Kian believes data can tell stories. He also knows these stories need to be translated for broader audiences. On a full-scholarship as an undergraduate, he learned to create data-driven narratives by studying both the quantitative rigor of economics and the subtleties of translation of comparative literature.

As an economist at RTI International by day, Kian distilled econometric models into actionable recommendations for clients ranging from F100 companies to federal agencies shaping national policies. Among the skills Kian honed were time-series and survival analysis, survey design, and project management. By night, he helped open an award-winning cocktail bar and optimized inventory by analyzing suppliers’ price lists and customers’ tastes. Somewhere in between, Kian learned to value sleep as if it were gold.

His instinct for analytics is built on years of helping clients ask questions with answers that impact the bottom line. He gets to those answers by obtaining, cleaning, and analyzing the right data. In the end, Kian makes data meaningful by communicating where analytics can take you, where it can lead you astray, and where it suggests you go next.

In his free time, Kian crunches whiskey auction results to find undervalued bottles. He has a love affair for soccer and once held a single-digit golf handicap. On his bookshelves are data visualization texts and collections of short stories in Spanish and Farsi. Kian dreams of a bar where old editions of the Harper’s Magazine Index create a whimsical wallpaper of thousands of statistics. In the meantime, he wants to pull all 165 years of those indices into an R data frame, ask you to pull up a chair, and tell you their story.
At a young age, Kimberly discovered her love for solving problems with sudoku, Rush Hour, and jigsaw puzzles. With each new difficulty level, she was determined to find a solution by contemplating strategies and predicting how different moves could impact the final goal. Even though the complexity of these games was nothing compared to what she would face in courses such as linear algebra and organic chemistry, her ability to approach challenges with positivity and determination would prove invaluable for any problem she would face. Kimberly is eager to integrate her problem-solving skills and strong mathematics background as an analytics professional to tackle new challenges.

During her undergraduate studies, Kimberly worked as a research assistant in an organic chemistry lab where she was considered one of the most dedicated students by diligently working to find solutions to each problem. She attributes her success in this position to efficiently running complex reactions and using data collected from analytical chemistry techniques to adjust reaction specifications and optimize results. Her passion for overcoming obstacles to accomplish her goals eventually led to her receiving an award that funded her research.

Kimberly has also enjoyed helping other students achieve academic growth. As a peer tutor, she provided creative explanations and encouragement to further students’ understanding of challenging calculus topics. She also led an after-school program at the Cary YMCA, where she helped elementary school students accomplish reading goals and worked with other counselors to execute activities.

Outside of academics, Kimberly loves running the greenways in her community, seeing musicals and plays at local theaters with her aunt, and discussing the latest episode of Game of Thrones.
Farvah’s love of math started in second grade when she felt the rush of adrenaline as she began the one-minute addition worksheets and completed them successfully with time to spare. Since then, Farvah has always excelled in quantitative fields as well as the sciences, but for the long-term was conflicted whether to seek a career in healthcare or follow a more quantitative route. To combine these interests, she pursued biostatistics where she took courses that made her proficient in SAS, gave her application practice with different survey methods, and introduced her to a variety of regression models. Another course exposed Farvah to analytic professions firsthand and the endless possibilities within the world of analytics. It was the combination of these courses that made Farvah increasingly interested in applying data sciences and actively pursuing higher education in analytics.

As an immigrant from India who has been living in the U.S. for 17 years, Farvah has always been interested in the many global cultures that are encompassed in this country. Her minor in Arabic supplemented her language toolbox that already consisted of fluency in Urdu and Hindi, with proficiency in Spanish. She enjoys getting to know diverse people and has used her language skills to tutor Syrian refugees and help other local immigrant children adjust to school life in America.

Outside of analytics, Farvah loves to try new spicy foods especially when she travels back to India. She enjoys playing flag football, and she is proud showing off her team’s first prize trophies from UNC Muslim Student Association’s annual Sportsfest competition. In addition to staying active, Farvah enjoys game nights with her close-knit family and is known for her contagious laughter that is usually spurred by her own cheesy jokes.
A demonstration of the Monty Hall problem in a business statistics course was the moment that changed Sam’s life, as it made him realize that intuition and reality can be very different, and that data is the best guide for sound strategy. Realizing the potential of the emerging field of analytics and the sheer joy of working with data, Sam committed to it completely. Working at Ernst and Young gave him his first analytics exposure, developing credit risk scoring models for BASEL II compliance for client banks where he also worked on derivative valuations and hedge testing.

Before joining the MSA program, he worked at AIG where he developed his leadership skills supervising a team of actuarial associates, reporting on the largest group of divisions in AIG’s casualty business. Recognizing their constant efforts towards process improvements, his team was awarded the Star Constellation Prize 2015-2016 by AIG CoE for being the best performing team in the year. He has been working towards getting analytics, banking, and insurance certifications from SAS, the Global Association of Risk Professionals, and the Casualty Actuarial Society. Though he has previous experience in banking, financial services, and insurance, he is interested in the wide array of opportunities existing in non-financial industries for analytics professionals.

Sam has a keen interest in geopolitics and history, and he tries to keep himself updated on the strategic moves that different countries make to realize their long-term goals. Playing badminton, table tennis, or soccer on the weekends is his idea of unwinding, and he regularly watches game and training videos to improve his tactical understanding of these sports. An avid food enthusiast, he likes to cook different recipes and experiment to add his own touch.
Enter stage left: a former theater designer in pursuit of a career in analytics.

After endless hours in a design studio, Kiersten walked away from Syracuse with various credits in costume and lighting design, including *Lord of the Flies*, a student production on which she crafted all the costumes; and *Stepping Out*, a main stage production on which she had only a month to design more than 100 costumes. Peering through that studio window, Kiersten considered that she wanted a different future. As she tunneled through mountains of snow on the way to her calculus final, she realized how much she wanted to get back to mathematics.

Theater is a collaborative art, and working on design teams taught Kiersten the importance of flexibility and compromise in creating a cohesive product. Her enhanced empathy skills from analyzing characters allows Kiersten the ability to read people. Paired with her experience as a choreographer and director, Kiersten knows how to adjust communication strategies accordingly and keep a team on task.

Kiersten always had a wide array of interests such as blogging about young adult fiction, choreographing, competitive dancing, and crafting the perfect playlist. She never saw an obvious career path; however, each step she has taken since committing to a career in analytics has made that path clearer.

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**Kiersten Kozbial**

Hometown: Iselin, NJ  
Citizenship: U.S.

**EDUCATION**

- **Syracuse University**  
- **SAS Certified Base Programmer**, 2017  
  SAS Certified Statistical Business Analyst, 2017
From independently learning HTML and JavaScript at age seven to becoming a self-taught multi-instrumentalist by age 12, James was born with initiative and a love for learning, computers, and problem-solving that ultimately led him to the world of analytics. After acquiring foundations for bioscience and medicine in college, he joined Prisma Group, a small international consulting firm, temporarily stepping away from bioscience to gain a better understanding of business development. However, during his time at Prisma Group conducting conventional market research, he discovered that conventional methods left heaps of market insights untapped that only a blend of creativity and analytics techniques could access.

James experienced his first analytics-based breakthrough when, during a project involving international airport security at Prisma Group, he was tasked with estimating the total U.S. market size for x-ray scanners. Due to the sensitivity of national security data, usual avenues of research were unavailable; so, James applied regression principles to public federal airport data to deliver an accurate estimate to the client. This creative success made him realize the power of statistical analysis and piqued his appetite for more data-driven problem-solving.

As a lover of effective teamwork, James enjoys collaborating with peers in class and making soul, rock, acoustic, and electronic music with friends on the weekend. He also enjoys creative learning as a way of life and can be found practicing keyboards, guitars, and drums or listening to various Bill Evans, Copeland, and Jacob Collier records. Apart from playing music, he likes reading about wildlife, philosophical arguments, and all sorts of technologies. Despite his diverse array of hobbies, James loves people more than anything and is often engaged in deep conversations with friends over food or volunteering in community service projects.
Sydney Lawton

Hometown: Morrisville, Vermont
Citizenship: U.S.

EDUCATION

- Elon University
  - B.A., *summa cum laude*, Environmental Studies, 2017
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Sydney’s background in environmental studies fostered her holistic perspective in which she seeks to understand our world in order to help people, communities, and the planet. During her first year of college, she was energized when she discovered how analytics fit into this passion and how data could be used to drive deeper understandings.

Throughout her undergraduate career, Sydney worked on several projects with a community focus. Most notably, she served as the student ambassador for a yearlong partnership with Go Global NC, a local organization whose mission is to help North Carolina succeed in a global economy. Sydney’s responsibilities as part of a close-knit team included data collection, data management, and Tableau visualizations to produce a dashboard tracking North Carolina’s global engagement. She is most proud of this work as it is innovative, highlighting how North Carolina is connected to other parts of the world.

Additionally, Sydney worked as a metrics intern responsible for conducting Elon University’s annual greenhouse gas emissions inventory. Her attention to detail, positive attitude, and dedication yielded a successful project whose results informed future university-level policy changes to increase sustainability across campus. Sydney also conducted research to understand what influences student engagement in an introductory statistics course at the undergraduate level. She hopes this manuscript will help educators better understand what students find engaging in the classroom and inspire further research.

Sydney grew up on a small horse farm in Vermont, which cultivated her love for the outdoors. She has been a lifelong competitive equestrian, enjoys breathing fresh air while hiking, and being in the moment on her yoga mat.
Daniel Li

Hometown: Brasilia, Brazil
Language: Portuguese
Citizenship: Brazil; U.S. Permanent Resident

EDUCATION

- Duke University
  B.S., Biomedical Engineering, 2012
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Daniel’s multicultural upbringing, interest in building strong relationships, and desire for problem-solving contribute to his capability and compassion as a leader. While in high school, Daniel created and led a team that earned a silver medal at the Brazilian International Young Physicists Tournament. In college, Daniel continued to seek new responsibilities, focusing on opportunities that brought people together. Besides captaining various intramural teams, he joined the school’s salsa dancing troupe where he taught lessons to communities on and off campus, and performed in front of hundreds of students.

In his professional career, Daniel gained a reputation for his dedication, perseverance, and ability to learn quickly. As a result, he earned his way onto a new team, created to focus solely on the company’s largest client, McKinsey. As the lead for Latin American projects on the team, Daniel increased business in Brazil by over 90%. His growing responsibilities, along with increased interaction with upper management, led Daniel to understand the impact analytics can have on a business. This became especially apparent when he worked to replicate the successes of his teams in other groups, and proposed process improvement changes at a company-wide level. These experiences made Daniel realize how data analytical skills can help him become an even better leader.

Daniel’s hobbies reflect his penchant for teamwork and problem-solving. Puzzling out of escape rooms has become his favorite, where he works with friends to solve creative and challenging problems under time pressure. Additionally, Daniel remains active in indoor soccer leagues around Raleigh as a goalkeeper and enjoys playing board games like Settlers of Catan and Resistance.
The one common thread throughout Anderson’s history is his ability to throw himself into his work with the utmost devotion. Originally intent on becoming an actor, Anderson attended the New York Conservatory for Dramatic Arts prior to university. Desirous of an undergraduate education to explore his interests, he left his home state of New Jersey to experience life at a small liberal arts school located in Virginia. This experience proved pivotal in altering not only what he wanted to do with his life professionally, but also how he would interpret and experience the world around him.

Developing an affinity for economics, Anderson ventured abroad to Shanghai to better understand the business culture and foreign relations. While seriously considering a PhD in Economics, Anderson experienced an epiphany that if he did not decide to learn mathematics he would forever limit his ability to understand the world around him. Only two years later, he graduated at the top of his class with a dual degree in mathematics. Upon graduation, he recognized that pursuing a career as a data scientist would provide a natural extension to his interests.

Since then Anderson has continually delved into individual projects to strengthen both his skills as an analyst and as a creative thinker. An outgrowth of his undergraduate work, Anderson has generated a predictive model for the NFL, MLB, and NBA to determine game outcomes. Simultaneously, he has been training computers for image recognition by preprocessing images, tuning, and testing results using convolutional neural networks.

When Anderson is not behind a computer or a book you can find him perusing an art gallery with a close friend, sitting in a jazz bar or a local theatre, or just being entertained by bad cinema.
Chris Limer

Hometown:  Hillsborough, North Carolina
Citizenship:  U.S.

EDUCATION

- North Carolina State University
  B.S., magna cum laude, Mathematics Education, 2012
  B.S., magna cum laude, Statistics, 2012
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Chris began his professional career investing in the next generation of students as a high school math teacher. For the past five years, he taught courses ranging from Foundations of Math 1 to AP Computer Science. Chris had positive interactions with his students and had a significant impact on their learning. He extended his impact outside the classroom as a wrestling coach, helping the team achieve perennial success in postseason competition. The investment that Chris put into his students and their success was frequently commended and rewarded with increased roles and responsibilities within the math department—as a team lead—and the school, where he was asked to attend conferences to bring information back to his fellow teachers.

Chris’ interest in data analytics emerged from regular reflection on his students’ academic performance and how his teaching practice affected their mastery of individual objectives. This collection of data helped to guide his teaching and led to increased proficiency and student success. Chris has chosen to invest further in his own education and knowledge of analytics by attending the Institute for Advanced Analytics. Through this pursuit he hopes to increase the audience that he can serve through his future work as a data professional.

In his free time, Chris enjoys spending time with his wife and one-year-old son. As a family, they enjoy swimming at their community pool, hiking trails at local parks, and attending Durham Bulls baseball games. Chris is an avid runner, completing three marathons, four half-marathons, and dozens of other road and obstacle course races. Chris also enjoys climbing tough routes at the local indoor rock-climbing gym.
Misty Mangiacapre

Hometown: Wilmington, North Carolina
Citizenship: U.S.

EDUCATION

- University of North Carolina at Wilmington
  M.S., Chemistry, 2016
  B.S., summa cum laude, Marine Biology with minor in Chemistry, 2013
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Misty has been a scientist since second-grade when she witnessed a cleaning solution magically transform an old rusty coin into a shiny new penny. During her undergraduate years, she participated in multiple applied learning opportunities that further developed her research skills and scientific curiosity. With a passion for preserving one of the world’s most mysterious creatures, she interned for several sea turtle conservation projects including the Karen Beasley Sea Turtle Rescue and Rehabilitation Center, Masonboro Island Reserve, and the Gandoca-Manzanillo Wildlife Refuge in Costa Rica. Naturally, her undergraduate research focused on sea turtle toxicology and conservation. As a graduate student in the Marine and Atmospheric Chemistry Research Lab, she sought a new challenge by studying the impacts of crude oil spills on estuarine ecosystems. The most rewarding part of her thesis involved data analysis, finding the pattern within the numbers.

Misty has always embraced opportunities to learn and has shared this passion by working as a science teacher and tutor. She taught undergraduate labs in general, organic, and environmental chemistry, served as a guest lecturer for MarineQuest summer camps, and scripted two short science videos on traditionally difficult concepts like density and moles.

Outside of academic ventures, Misty has surfed competitively for five years, placing in several pro-am events. She relaxes by exploring outdoors, cycling on back country roads, mountain biking all over North Carolina, and practicing yoga. If you visit Wilmington, you may want to check out her exhibit at Expo216 where she upcycled discarded ocean plastics into beautiful art as part of a larger effort to bring awareness to the Plastic Ocean Project.
Fueled by his intellectual curiosity, Daniel sees the world a little differently than most people. Growing up a baseball fan with binders full of neatly organized baseball cards, it was not the front of the baseball card that he liked; but, it was the back of the card showing the statistics that captured his attention. Today, he does not jump immediately to the video highlights of a game, but to the box score with all the numbers. Daniel’s fascination with data as a way to better understand the world has led him to the field of analytics, where he can use his inquisitive nature to analyze and solve problems.

Daniel’s love for finding insights and new knowledge led him to undergraduate research, where he had the opportunity to work extensively with raw trial data. He wanted to find out if certain muscles contributed to a stroke survivor tripping when they walked. After cleaning the data and running analysis, he was ultimately able to identify a specific muscle that behaved differently when a trip occurred. Throughout his research, he realized that analytics would provide him with the perfect outlet to do what he enjoys most—methodically analyze a problem and find solutions based on numerical evidence.

Equipped with his curiosity and love for data, Daniel enjoys reading about current events and sports through the eyes of analytics on websites like FiveThirtyEight. He also loves exploring the country and has a goal of seeing a baseball game in every MLB stadium. In his downtime, he enjoys playing the guitar, going on hikes, and playing basketball and golf.
As a child, Samantha’s favorite subject and hobby was math and art, respectively. The older she got, the more she attempted to find a connection between her two passions. Finding statistics at Lehigh sparked her interest in creatively applying math to solve problems. Data and paintings both have layers, take time to develop, have no “right” answer, and can be created differently through each approach and skillset used.

Samantha’s research projects at Lehigh and internship at KBRA (Kroll Bond Rating Agency) led to questions that she eagerly wanted to learn how to answer. Although she enjoys the meticulous process of data cleaning and basic analytics that stimulate questions, she knows that is just half the battle. Samantha is consistently learning new tools and skills in an attempt to answer these questions. She finds this an exciting process that ultimately leads to creating data stories.

With a multitude of ways to solve problems with data, it is important to have confidence throughout the process. Kickboxing and Muay Thai have not only been a great stress reliever to Samantha, but a way to feel more powerful and confident. She translates these skills in a professional setting by trusting her individual work.

Samantha prides herself on being organized and self-sufficient; yet, she loves the efficiency and interesting insights brought by working in teams. She often takes on an unofficial leadership role to guide a team to effectively complete tasks. At Lehigh, working on a team creating a social simulation board game, Samantha developed team management skills—the most important being effective communication that complements how to address and solve any conflict.
Raised in a military family, Brannan was fortunate enough to experience the cultural diversity of many states and countries before eventually establishing roots in Raleigh. During his undergraduate studies at NC State, he developed an appreciation for the power and pervasiveness of analytics. His aptitude for statistical modeling allowed him to apply his coursework to various real-world examples, ranging from time series analysis on seasonal consumer sales to modeling a professional hockey player’s seasonal points per game average. After college, his growing interest in analytics was solidified while working at the newly established SECU Life Insurance Company. There, he witnessed firsthand the impact analytics had on accurately assessing client risk and ensuring SECU’s pricing models were competitive, yet profitable.

Innately curious, Brannan has always been driven by the pursuit of knowledge and the desire to improve. Whether he is teaching himself a new programming language, engineering new backpacking gear to bring on his next trek, or undertaking a demanding sport like ice hockey, he is always looking to broaden his skillset. When Brannan is not cranking out code or enjoying North Carolina’s gorgeous outdoors, you can find him in the kitchen whipping up authentic Korean cuisine or volunteering with Civitan International, a worldwide service organization. During a successful fundraising campaign in 2016, he helped raise over $5000 for Special Olympics, and in return, was selected to go “Over the Edge”—rappelling 30 stories down the Wells Fargo Capitol Center. The satisfaction he experiences from improving himself and those around him is what motivated him to pursue a career in data science.
From a young age, Elliott has been fascinated with going to the grocery store. The sight of freshly packaged goods arranged neatly along each aisle, the aroma of bread at the bakery counter, the sounds of shoppers bustling to find their favorite products—each trip was a new experience.

Through his high school and collegiate education, Elliott was motivated to understand the logistics and complexities of how companies decide which products get produced, where they are sold, and what consumers purchase. He pursued the field of food science as an undergrad major and has worked for large corporations that manufacture consumer packaged goods (CPG), such as Novozymes and PepsiCo. At PepsiCo, he was tasked with designing a novel food ingredient that could be applied to beverages across PepsiCo’s many brand platforms.

His graduate studies in sensory and consumer science opened the door to a breadth of understanding about consumer behavior and motivations. Elliott’s research interests revealed to him the large amount of data and statistics, from myriad sources, that analysts at consumer-facing companies must handle and decipher in order to provide market-ready products or solutions.

Being a thorough learner, Elliott sought training in data science and analytics in order to better equip him to be an industry leader and data professional in an ever-changing market. The dynamic needs of many industries require technical professionals who are effective from project to project. Elliott seeks to use his scientific understanding and advanced analytical skills to help companies address necessary objectives from day one.
Growing up in a small town, Sarah worked many summers on the family farm. In the role of Production Lead, she oversaw teams completing projects, such as applying pesticides to the 800 peanut acres and spreading fertilizer on the 1500 cotton acres before planting. Sarah’s time on the farm provided her with an opportunity to manage a team and demonstrate her strong work ethic and ability to streamline operations. Through this experience, she gained many insights on teamwork, the importance of details and deadlines, and an appreciation for air conditioning. These strengths and lessons echo into her success both academically and professionally.

Sarah was the recipient of the 2017 Excellence in Marketing Award, an award bestowed to the marketing major showing a mastery of skills both inside and outside of the classroom. It was in the classroom, a market research class, that sparked her interest in analytics. Sarah was enthralled by discovering patterns and trends in the customer survey data the class utilized and understanding how that influenced marketing and other business decisions.

While interning with Cumberland County’s Extension Center, Sarah exhibited her affinity for details. She redesigned and expanded their Local Food Guide for consumers searching for locally-grown produce. Sarah also partnered with the County’s GIS office to create an attractive, user-friendly interactive map as a supplement. Meeting with almost all the growers, she became familiar with their stories, struggles, and the impact they wanted to make in the surrounding communities.

Sarah finds joy in the simple things such as spending time with family or flying a kite. Although she enjoys discovering new places and trying out new restaurants, not much can top an evening with an Indie film on Netflix with her cat, Magoats.
Alan sees analytics as a blend of art and science; he strongly believes that behind the numbers, there is a story to be told. Determined to play trumpet professionally, Alan initially pursued a degree in music. He quickly found a part of himself was empty without an analytical problem to solve. Switching to a chemistry degree satisfied his love of learning and challenged him to master complex subjects. This blending of his love for art and science allows him to approach problems holistically.

Alan is known as a natural leader with a quick wit and curiosity that drives both his professional and personal development. He has 11 years of experience in the pharmaceutical industry, including six years as a project manager. Through these experiences, he has learned the most effective way to achieve objectives is through building relationships and leading by influence. With a passion for the “people” side of data, Alan focused his analytical abilities on developing pricing models for analytical chemistry services. In discovering how customers purchased pharmaceutical services, he effectively delivered the value that customers expected.

Outside of work, Alan is an avid reader of ancient Greek and Roman history. He also possesses a lifelong love of cooking that started from helping his mom in the kitchen as a kid. In his spare time, Alan loves spending time with his wife and seeing the world through the eyes of their two-year-old son.
Jabari’s path to the Institute embodies the philosophy that life is not about resources, but resourcefulness. He understood this from an early age and dedicated his career aspirations to help others realize their own personal brilliance. He believes that, through data, we can enable people to change the world. This belief led him to work for the Center for Analytics Research and Education, CARE, at Appalachian State University, an organization dedicated to using “Analytics for Good.” In this experience he realized the versatile applications of data science, saving the local utility over $100,000 by reducing energy consumption during peak demand. After experiencing the direct social impact of data analysis, Jabari adopted “Analytics for Good” as his own personal mission.

As a rising senior, Jabari joined the MetLife Global Technology family as a business intelligence intern, solidifying his fascination for interdisciplinary collaboration. He was tasked with creating a dashboard that utilized QlikView and SQL to meet the needs of multiple lines of business. This dynamic visualization continues to serve executives across MetLife’s finance, insurance, and data analysis sectors.

Jabari credits his tireless work ethic to his experience mowing lawns every summer of his adolescence. Since then, he has applied that diligence to his interests both in and outside of the classroom. Away from the world of analytics, he enjoys playing blues and folk guitar and competing on the national and international judo circuit, which has taken him to Texas, New York, and Canada.
Damon Neanover

Hometown: Jacksonville, North Carolina
Citizenship: U.S.

EDUCATION

- University of North Carolina at Chapel Hill
  B.A., with Distinction, Political Science; Global Studies, 2012
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Damon has an endless supply of energy and enthusiasm that he uses to embrace new challenges and improve everything he encounters. He has a passion for working with people and welcomes the chance to collaborate with others to solve social and technical issues of modern society. Damon continues to seek leadership and volunteer opportunities where he can put his energy towards causes that benefit others.

Since graduating from the University of North Carolina at Chapel Hill in 2012, Damon has worked in a variety of capacities where he was able to develop and polish his interpersonal and technical skills. Through Teach for America, he taught high school Civics and developed effective communication skills to empower students and improve their outcomes. As Event Chair for his local Relay for Life, he gained critical leadership experience through organizing an event that raised over $100,000 for cancer research. While lobbying members of Congress for the American Cancer Society, he focused on utilizing research data to advocate for palliative care on behalf of cancer patients. Working for two local tech start-ups, he acquired valuable project management skills that helped him improve response speed by 400% and decrease customer-facing bugs by 75%.

An avid runner, Damon loves logging miles on the American Tobacco Trail and working towards his goal of running a marathon in every state and on every continent. While he is running, Damon enjoys listening to novels like *A Song of Ice and Fire* on audiobook and history-related podcasts. He also loves to experiment in the kitchen, incorporating new and unique flavors while baking a cheesecake or brewing a hoppy IPA.
One late night in the office, James was pounding on his keyboard, determined to solve a problem with abnormal data trends in a product he was managing. He would not allow himself to leave until it was solved. Several hours later, he eventually found the problem caused by outliers and developed a solution to handle them. His hands shaking from the extra caffeine and adrenaline, the electrifying feeling of accomplishment and fascination with the results made him realize his passion for data and desire to pursue the field of analytics further.

James is an honorably discharged Sergeant of the South Korean Army, being stationed in an intelligence agency as a translator. The hard physical training and regimented lifestyle helped him gain the ability to work under extreme pressure and strive for a common goal. Applying what he learned from the military, in addition to his problem-solving skills and deep knowledge of finance, James went on to manage three regulatory software products as a product manager at Sageworks. This included spearheading the development of a large financial data product from start to finish. He oversaw all aspects of the product from user interface design, data management, client engagement, and business development. The product stayed consistently cash flow positive during his tenure as manager.

James is a self-proclaimed history geek, with a particular interest in 19th century Europe. On days off, you’ll often find him devouring documentaries on the History Channel or reading online articles on historical theories. His dream is to travel Europe on a museum tour—hitting the Louvre, British Museum, and Vatican Museums on the way.
In the beginning of his computer science degree at NC State, Vatslav naively assumed that statistics would be a course he would never encounter again. It wasn’t until his senior year that he took a data science course, co-taught by the departments of Statistics and Computer Science, where he realized just how intertwined the two disciplines are. It was through this course that Vatslav was exposed to analytics, which fueled a drive to seek a deeper level of understanding.

Vatslav's four years of work experience at SAS Institute placed him in a unique analytical environment that not only further ignited his interest in, and passion for analytics, but also provided him with the means to apply those data skills. At SAS he was tasked with solving problems that required data manipulation, forecasting, visualization, and automation to produce business intelligence reports involving very sensitive data, with visibility extending to high-level executives.

In his free time, Vatslav may be found in his garage working on a car, another home improvement project, or roaming through the pantry in search of something good to eat. Outside the confines of his home life, Vatslav is a private pilot who enjoys soaring over beautiful landscapes, exploring new airports, and sharing those experiences with others.
Ashley Peterson

Hometown: St. John, Indiana  
Citizenship: U.S.

EDUCATION

- Purdue University
  - B.S., Applied Statistics with minor in Psychology, 2017
  - B.S., Mathematics, 2017
- SAS Certified Base Programmer, 2017
  - SAS Certified Statistical Business Analyst, 2017

Ashley developed a passion for data science her sophomore year in a big data course, where she analyzed airline data spanning 20 years. Digging through the dataset to provide insights, such as which airport was the busiest, sparked her interest and showed her the potential of data analysis. Participating in ASA’s DataFest confirmed Ashley’s desire to pursue a career in data analytics. She and her team worked diligently to provide the sponsor with key insights. Creating a map of the United States in R displaying their uncovered information resulted in Ashley and her team winning Best Visualization. Ashley strengthened her analytical abilities by researching missing data, the root of her research project. She explored multiple imputation as a method of handling missing data in the Midlife in the United States (MIDUS) survey dataset. Creation of the project led to submitting a research article that was chosen for publication in the Rose-Hulman Undergraduate Math Journal: Fall 2016.

Throughout college, Ashley enjoyed being involved in organizations that helped others. Ashley became a mentor, then a team leader in Women in Science Programs to help other women succeed in science fields. Boiler Gold Rush is another organization that Ashley passionately volunteered for as an orientation leader, helping new students feel at home. These experiences added to Ashley’s repertoire, enhancing her professional experience working for Nielsen as an OLTP Data Science Intern.

Outside of analytics, Ashley enjoys being active whether it’s dribbling a basketball in intramurals, kayaking, or standup paddle boarding. Recently, she took a flower arrangement class finding a hidden talent creating bright, colorful designs.
Jola's multicultural upbringing in Poland and Vietnam instilled in her the nagging need to explain causes and seek patterns in the world around her—an interest she would later pursue in college as a business economics major. Her fascination with analytics was kick-started by a project with Will-Burt Company in the summer after her junior year. Her team was tasked with identifying key factors affecting the company’s profitability. Because of the complex nature and structure of the data, the assignment became so challenging that it found its way to her dreams at night. Working day and night to keep the project on track, Jola and her team found evidence that officially confirmed management’s suspicions. From then on, she would become an avid supporter of analytics, leading her to pursue a data-focused thesis in her senior year. Jola’s year-long independent research centered on the economics of U.S. wine. She utilized regression analysis to explore consumers’ bias in their purchasing decisions and found that consumers’ willingness to pay is significantly dependent on where wines are produced.

Determined to gain further hands-on experience with data, Jola interned at EventUp, a start-up in Chicago, as the team’s sole analyst. She worked directly with management to solve the company’s most pressing issues, such as identifying patterns in consumer behavior. In the evenings, she took an online SQL course to further boost her analytics capabilities.

When she is not obsessing about data, Jola immerses herself in the world of books and enjoys catching up with the world news. She also takes pleasure in wandering around art museums (her favorite so far is the Art Institute of Chicago), as well as capturing her friends’ most unflattering sides with her camera.
Tom Pinckney

Hometown: Williamstown, Massachusetts
Citizenship: U.S.

EDUCATION

- University of North Carolina at Charlotte
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

An explorer at heart, Tom revels in discovery, yearning to know what’s over the hill, hidden around the bend, or buried in the data. From backpacking the Pyrenees in Spain, to exploring the villages of northwest Cameroon, Tom spent his adolescence seeking adventure. In college, he shifted his exploration to intellectual subjects and challenged himself to succeed by registering for stimulating classes. A thousand cups of coffee and many sleepless nights later, Tom persevered to score in the 100th percentile on the American Chemical Society’s National Organic Chemistry exam.

Tom’s undergraduate success led him to Novozymes, where he found analytics combined his passion for exploration with his desire to push himself intellectually. Each addition to his statistical skill set allowed him to examine data in new ways and opened doors to work with diverse people on complex problems. He mined thousands of journal articles for key information about potential products and leveraged bioinformatic data across time to track the environmental fate of microbes. Before long, Tom’s newfound passion overflowed into his personal life, and he found himself visualizing local weather patterns and mining transcripts of his favorite podcast, *This American Life*. At the Fall 2016 JMP conference Tom felt like a kid in a candy shop, going lecture to lecture soaking up knowledge from experienced analytics professionals. On the last day, as he sat in the lobby watching the attendees return to their jobs, he knew he had to join them and pursue a career in analytics.

When Tom’s not exploring data, you can find him hiking Umstead state park with his three-year-old son, getting ice cream with his one-year-old daughter, or visiting every brewery in Raleigh with his wife.
CAUTION: Graphic content ahead! When Nikhil was in middle school, his parents started a graphic design company (sort of). Although the company barely saw the light of day, a whole suite of industrial-strength design software had been procured—software that, one day, Nikhil would stumble upon. He would mangle beautiful family photos and create outlandish illustrations with the software, but would also develop a sustained passion for visual design in the process. This fascination for visual design would be matched only by his yet-to-come interest in analytics. When it did, it would be a beautiful marriage: analytics would provide the science, and design would bring the art.

Now, flash forward to Nikhil’s time at UNC as a statistics and computer science double-major. He was selected to be a teaching assistant (TA) for an object-oriented computer science course. This would serve as an outlet for his passion to teach and share—something developed in high school while tutoring math and chemistry. What he enjoyed about TA’ing was taking convoluted concepts and making them easy to grasp. In an interesting twist, two students that Nikhil taught would intern with him at SAS. The interaction between Nikhil and the interns produced an unforeseeable result: the Carolina Analytics and Data Science (CADS) club.

CADS educates students on analytics and connects them with professionals in the industry. During his time at SAS, Nikhil had cold-called a few C-level executives, managing to pocket a few business cards. While these weren’t exactly enough to fill a Rolodex, they were enough to seed the speaker’s list for the nascent analytics club.

Somehow, all of these skills and passions combined to turn Nikhil into a data scientist. Maybe predictive analytics could have forecasted that Nikhil would end up in analytics!
When Tori began her career in marketing, she didn’t anticipate developing a passion for turning subjective information into quantifiable data. As the primary content strategist on the NC Digital Commons project, Tori utilized analytics to develop and communicate a strategy for overhauling over 75,000 pages of government website content. The project exposed an opportunity to remove subjectivity from content strategy, shifting the practice from a craft to a science. As a result, Tori led her company to acquire and rebuild Blaze, a cloud-based content analysis platform, now used by agencies across the world to develop data-driven content solutions.

With an eclectic background in film theory, communication, marketing, and digital strategy, Tori offers an innovative but pragmatic perspective. Since 2010, she has worked in technology consulting as a digital strategist, advising on analytics, marketing strategy, information architecture, and service design for commercial organizations, government agencies, and higher education institutions. Tori’s intrinsic motivation and contagious enthusiasm made her a valuable leader for the marketing department. She is methodical, passionate, driven, and adaptable. Tori views ambiguity as opportunity, constraints as inspiration, and loves the process of solving a complex problem.

Tori’s insatiable passion for learning has encouraged her to become an intrepid professional, motivated by a challenge. She is attracted to analytics because of the ever-changing technology and its universal application. Analytics provides her an avenue into new industries and contexts, like a familiar path into unknown territory.

Her fascination for learning draws Tori towards another favorite pastime—investigating the depths of intriguing Wikipedia articles. She also enjoys discussing *Westworld*, her favorite TV show, while drinking her favorite beer, Rochefort 10.
An international student from China dreaming about becoming a movie director, Yizhou found her inner curiosity for data science after she took her first business analytics class. She was fascinated by the fact that data scientists draw insights from large sets of data in order to tell a compelling story, just like directors connecting seemingly meaningless dots to create an engaging movie.

Working as a resident assistant in a freshman residence hall for two years, Yizhou developed strong cross-cultural communication skills and became a great leader. She loved to learn her residents’ needs by actively communicating and observing, and strove to create a supportive environment. This experience further encouraged Yizhou to pursue her career as a data scientist, where she aspires to study customers’ needs and generate solutions that are simultaneously creative and realistic.

During her undergraduate years at William and Mary, Yizhou was a research assistant at an automatic text mining lab, where she focused on developing advanced machine learning skills, such as automated text extraction, topic modeling, and network analysis. She further applied her data science knowledge when working as a technical intern at The Institute for Theory & Practice of International Relations at her college. There, she developed an automatic citation extractor for multi-language international relations papers, which minimized manual article coding for research scholars who previously did research in a more traditional way.

Beyond work, Yizhou is most passionate about understanding cultural differences through travel and food. If you’re around on a weekend, you’ll find her exploring Korean, Indian, Peruvian, or Ethiopian restaurants in her neighborhood.
Raised in the multicultural country of Singapore and educated in both the British and American education systems, Manaswini has always valued diversity. Driven to study the differences between countries, she was innately drawn to comparative analytics, whether it be in economics or politics. An avid reader with a passion for lifelong learning, Manaswini would often be found reading her father’s *Time*, *The Economist*, and *Forbes* magazines even at an age when she barely understood the concepts. This passion effortlessly translated into her fields of study and research.

In her undergraduate years, as she analyzed the political stringency of the European pharmaceutical industry and its effect on drug prices, she came to the realization that the basis of any strategy or policy is almost always rooted in numbers. The idea that data drives decisions was seeded even deeper during her three months at Target as an Executive Summer Intern. Due to her strategic and results-driven nature, Manaswini tripled the store’s Cartwheel App sales from 2% to 6% in a span of six weeks by implementing internal sales and marketing tactics based on sales, revenue, and customer traffic data.

An insatiably curious and driven individual, Manaswini has a number of interests outside of school. She is particularly enthused by dance and has consistently been involved in Bollywood dance competitions and in teaching Bollywood and Zumba to her peers. Her experiences in various leadership positions, ranging from being president of a dance club to that of a debate team in Singapore, have instilled in her a sense of drive, resilience, and adaptability. In her free time, she enjoys listening to rock and metal music, playing the electric guitar, and practicing hand-lettering.
James Ringer

Hometown: Mercer, Pennsylvania
Citizenship: U.S.

EDUCATION

- Virginia Tech
  M.S., Statistics, 2008
- Bucknell University
  B.S., cum laude, Mathematics, 2001
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

James has two driving interests: a desire to help people and an aptitude for quantitative problem-solving. His logical side moved him to become a mathematics major in college; yet, working one summer as a camp counselor demonstrated how he could combine his interests to help others manage life’s challenges. This revelation led him to become a high school math teacher. James invested time in students’ lives through coaching sports, advising student clubs, and attending many extracurricular activities. The hours spent were invaluable in building trust with his students and that trust resulted in opportunities to mentor students as they sought his guidance on concerns they were facing.

While teaching, James craved new opportunities to stimulate his mind. Therefore, he pursued a master's degree in statistics; upon completion, he began a new career in statistical software development at Minitab. As a software quality engineer, James worked on and led teams of quality engineers in validating statistical methods within an agile software development environment. The highlight of James’ time at Minitab was seeing one of his mentees become the quality engineer team leader for a company product. Creating team environments where individuals can thrive together, to solve complex problems, compelled James to pursue analytics.

Away from work, James loves spending time with his wife and boys playing games like Sorry! or reading aloud their favorite books. Having adopted two of their boys, he and his wife are dedicated to assisting families interested in pursuing adoption. James also enjoys basketball, running, and cheering on the Pittsburgh Steelers.
Eliza always fostered a strong desire to serve and influence her local community. This passion drove her to pursue an education in public policy. While at UNC, Eliza led a service-oriented organization that worked to enhance the lives of the local elderly population through one-on-one visits, group enrichment sessions, and an annual “Senior Prom.” Eliza recruited and retained team members, innovated plans to elevate awareness across campus, and motivated team members to become personally invested. At the end of her undergraduate career, Eliza interned with the NC Department of Justice. There, she refined her ability to effectively communicate with the public by cultivating her written skills through drafting a consumer column regarding caregiver scams and assisting with revisions of policy interaction sheets. The office was heavily involved in community outreach, so Eliza studied public speaking and learned how to inform audiences in an engaging and meaningful way.

It was through Eliza’s policy background that she realized the true power that statistics and data science hold in making impacts on both institutions and citizens. This motivated her to delve into the world of data analytics, pursuing post graduate classes and earning a Graduate Certificate in Applied Statistics & Data Management. While taking classes, Eliza developed her ability to work under pressure and maintain a positive and professional demeanor through a customer service position in the healthcare sector. These experiences fueled her excitement to utilize analytics to formulate innovative problem-solving approaches for a variety of domains.

Eliza enjoys engaging with the community by volunteering with an elementary school reading program and walking the family greyhound in neighborhood parks.

EDUCATION

▶ North Carolina State University
  Graduate Certificate, Applied Statistics and Data Management, 2017

▶ University of North Carolina at Chapel Hill
  B.A., with Distinction, Public Policy with minors in History and Mathematical Decision Sciences, 2015

▶ SAS Certified Advanced Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017
Alfy Elsa Samuel

Hometown: Mumbai, India
Languages: Hindi, Marathi, and Malayalam
Citizenship: India

EDUCATION

- University of Mumbai
  Bach. of Computer Engineering, First Class with Distinction, 2013
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Alfy believes every minute must matter. Always seeking excitement, she may be found trekking at high altitudes, researching the secret lives of monarchs, or scouring the blogosphere for the hottest AI research. Among her many interests, a source of excitement which has endured since childhood is her love for solving puzzles—from Rubik's cube, Sudoku, and ciphers to nifty algorithms that wheedle data into revealing its secrets. That's what makes Alfy tick faster than the clock.

Alfy's work as a decision scientist for AIMIA in her four-year stint at Fractal Analytics shaped her professional ambition the most. Here, she modeled customers' whole journey—acquisition, engagement, win-back, share of wallet, and attrition. She consulted and influenced stakeholders and decision-makers across the entire value chain—from the CMO to marketing support. Watching her solutions generate $30 million in revenue added to her thrill in solving puzzles. Alfy has since been deeply interested in harnessing analytics to empower and democratize decision-making in corporate as well as social enterprises.

A social soul, Alfy thrives in the company of others, whether problem-solving or winding down. She led Fractal’s CSR initiative at the Vidya Foundation where she worked to empower lesser privileged children and women—a cause she identifies strongly with. Alfy trained over 300 colleagues at work in SQL, Spotfire, VBA, and Alteryx because she enjoys learning through teaching. While a CS undergraduate, she co-authored a new language to compute discrete math in Haskell. In her new home in North Carolina, she balances her academic life with playing soccer, exploring sushi bars with her classmates, and improving her running time.
Shreye Saxena

Hometown: Raleigh, North Carolina
Citizenship: U.S.

EDUCATION

- North Carolina State University
  B.S., *summa cum laude*, Computer Engineering with minor in Business Administration, 2015; Valedictorian
  B.S., *summa cum laude*, Electrical Engineering, 2015; Valedictorian
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Shreye is passionate about using his strategic thinking, project management, and analytical skills to drive social progress. Most recently on the strategic initiatives team at Kiva, Shreye led the creation of a platform where MBA students could evaluate the effectiveness of social enterprises that were applying for Kiva loans. Despite austere resource constraints, Shreye’s “crowd-vetting” initiative was adopted by 12 top graduate programs as well as BlackRock Global Philanthropy. The program could make loan determinations on 10 times as many loan applications as Kiva’s existing vetting processes.

Shreye’s fervor for effective social impact took root during his days at NC State University, where he graduated as a valedictorian. While at NC State, Shreye co-founded a nonprofit that enabled small businesses to raise point-of-sale donations for local schools. Leveraging a $50,000 grant from SECU, Shreye scaled the fundraising model to reach 9,000+ businesses nationwide.

Prior to Kiva, Shreye was an analyst in Deloitte Consulting’s technology strategy practice where he gained experience with diverse, cross-sector projects. Whether tracking $242M in booked savings for a Federal health agency, or improving a distributed development team’s efficiency for an asset management firm with $2.4T AUM, Shreye was trusted by his clients to deliver on ambitious strategic goals.

Appreciating a healthy work-life balance, Shreye frequently escapes the city to find reprieve among nature’s wonders. His favorite hike is to the summit of Angel’s Landing in Zion National Park, which he encourages visitors to try doing barefoot. Shreye is also an avid homebrewer—his DIPA recipe beat out stiff competition to be voted the best brewed beer in Deloitte’s Boston office.
From an early age, Michael enveloped himself in all things football, eating his mother's Sunday dinner while tuning into the Jets game. The following morning, he would marvel at the power of statistics in sports during his ritualistic *Sportscenter* session. Michael's affinity for numbers led him to Appalachian State University, where he completed degrees in both economics and marketing. His academic pursuits and personal interests collided during his senior year when Michael modeled home game attendance in the NFL based on a team's current and historic win percentage. Throughout the entire process, he felt a clear sense of direction, purpose, and excitement, and it was ultimately his most fulfilling academic experience. This, in conjunction with his subsequent job experience and unquenched thirst for knowledge, led him to the field of analytics.

Early in Michael's career as a market analyst for Renfro Corporation, a major textile manufacturer, he leveraged syndicated market data to provide competitive industry analysis and actionable insight for key decision-makers. In addition to performing analytics, Michael presented his relevant findings to the sales team, marketing team, and executive committee. Michael then took on a more authoritative role, leading projects to improve internal performance and establish efficient processes. His efforts reduced the delivery time of open order reporting to external customers by 75%, as well as created a process to eliminate obsolete raw materials.

In addition to Michael's love of football, he enjoys taking on various woodworking projects. In his spare time, he can be found outside either hiking, fishing for bass, or playing football, basketball, or golf. He also enjoys cooking with an emphasis on Italian recipes passed down to him from his grandmother.
Allison attributes her empathetic and inclusive approach to life, work, and school to her unique upbringing. Until the age of 15, she was raised in a Saudi Arabian expatriate community with people from countries all over the world. The opportunity to interact with a range of cultures afforded her a global perspective and improved her communication skills with people of different backgrounds.

In the nine years since completing her undergraduate degree at NC State, Allison has held positions in the fields of legal, accounting, and finance. In her most recent role as Quality & Controls Specialist, her time was spent analyzing data, interacting with clients, and communicating with leadership about how to improve the products and services offered. When she first joined her team, they had limited analytics capabilities and struggled to connect facts to assumptions. Recognizing the need for tangible solutions, Allison taught herself basic data analysis by experimenting with available datasets and learning from colleagues, and she used this skill to create valuable monthly reports for leadership. Through this work, Allison experienced the importance of data-based decisions and realized data analysis was the favorite part of her job. She is excited to spend her time at NCSU’s Institute for Advanced Analytics to explore data science roles in other industries and positively impact the world with her persistence, dedication, and considerate nature.

When not in class, you will likely find Allison with her two rescue dogs: Kayne and Calvin. Together, they have helped her train for three half-marathons and stay active with daily walks, jogs, and hikes. Additionally, as a recent first-time homebuyer, Allison is expanding her skillset with DIY renovation projects—most recently installing a set of French doors and new vinyl siding on her backyard shed.
Charlie’s clearest memory of mathematics’ near-magical ability to explain the world occurred when he first encountered physics. After each class, he and two teammates would spend their lunch period discussing the lecture, creating new scenarios, and developing a deeper understanding of the material. Occasionally, these discussions would expand to fill the time on long runs at cross country practice.

The focus on teamwork and self-study to develop mastery has continued into his career, leading Charlie to take advantage of every opportunity to develop his analytical skills. This is exemplified by the three months he spent volunteering with an international research institute in Sydney, Australia, collaborating on meta-analyses and modeling predictors of clinical outcome. Collaborating on publications and international guidelines enhanced his appreciation for professional partnerships, particularly the potential for analytical results to influence public policy.

Charlie’s professional path included a transition from clinician, to teaching assistant, to graduate level course director in topics including research methods, statistics, and measurement theory. He supervised clinical resident and graduate student group projects, providing project management and statistical analysis. Relationships developed with physical therapy and surgery colleagues provided him with access to clinical and research databases; this led to a wide variety of analyses, resulting in dozens of publications and national presentations.

Ever since his days discussing physics on the run with his teammates, running has remained an important part of Charlie’s connection to his roots. Having grown up following and celebrating the annual New York City marathon, he recently achieved a lifelong goal by meeting the time-qualifying standards for the New York City and Boston marathons.
As an elementary school student, Abdul found himself regularly analyzing novels, games, and television series to understand their plots and often predict their endings. It was through this analysis of diverse resources that Abdul realized his passion for discerning trends and identifying inconsistencies. During undergrad at UNC Chapel Hill's Kenan-Flagler Business School, Abdul realized that business is essentially the assimilation of data and communication.

In an effort to diversify his skill set and knowledge base, Abdul held internships in the areas of sales, information technology, operations, and consulting. Abdul’s favorite internship experience came during his time at John Deere, where he managed the U.S. portion of a global waste re-management project. It was during this sophomore year internship that Abdul’s technical and analytical skills were challenged. He responded with a proposal that would save the company approximately $670,000 in cost savings. He found this cost savings by analyzing the waste streams each factory used across the nation and created a spreadsheet that was later distributed to every factory manager in the U.S.

Abdul looks forward to a challenge and brings a sense of enthusiasm that affects his colleagues, even in the most stressful of times. Outside of class, Abdul satisfies his hunger for challenge by playing Settlers of Catan, hiking in Pisgah National Forest, and playing pick-up games in a variety of sports. In his free time, Abdul enjoys watching NCAA football and basketball—especially when it comes to the Tar Heels!
Amanda Shirey

Hometown: Cary, North Carolina
Citizenship: U.S.

EDUCATION

- Clemson University
  B.S., *magna cum laude*, Mathematical Sciences with minor in Business Administration, 2017
- SAS Certified Base Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017

Passion. Passion drives Amanda in every facet of her life, and she strives to exude that passion in each situation she encounters. Passion for her alma mater, Clemson, led to her pursuing opportunities to give back to the university. She joined the College of Engineering and Science Student Advisory Board as a Mathematical Sciences representative her freshman year, working with students and faculty over the next four years to improve the department through student-led initiatives.

Amanda then worked as an intern in the Office of the VP for Finance and Operations at Clemson. Visualizations, made using Tableau, drove the realization of significant savings opportunities by transitioning research funding from internal to federal sources. Through these experiences, she realized her newfound passion for utilizing data to optimize situations and solve problems. Her inspiration to pursue data analytics continued to grow during her internship at IBM. Using various analytical tools, including IBM’s Watson, her team discovered $8.6 million in potential savings for IBM’s procurement division.

Growing up in a family who loves to travel, Amanda has visited 16 cities in seven countries outside of the U.S.—including a summer spent abroad in Italy. She plans to continue to indulge this passion for adventure by traveling to explore new places, cultures, and foods. Closer to home, Amanda grew up in a house full of pets and worked at a summer camp with horses for five years. Not surprisingly, she is an avid animal lover and enjoys volunteering at her local animal shelter, and she can’t wait to adopt some pets of her own. Amanda looks forward to finding new passions and dedicating her life to bettering the world around her through data analytics.
While pursuing his undergraduate degree, Florian helped to scale a small business within WIRED Magazine and overcome the challenges that come with rapid growth within a large corporate environment. He was largely self-taught and saw everything as an opportunity to learn and build. He seized tasks and rose to the challenge, thriving with the increasing pace and volume of work as clients multiplied. Working equally with troublemakers on the pages of WIRED—bitcoin miners, futurists, biotech entrepreneurs, and the corporate leaders making big decisions—he assisted the execution of a new range of programs that WIRED had not run before. The most successful was WIRED Consulting, which focused on curating tailored “Shock and Awe” sessions for senior executives on the future of technology and society and the profound impacts on core business challenges for individual companies.

After successfully completing his degree with First Class Honors, Florian earned a certificate from MIT in Future Commerce—FinTech. He learned about strategic analysis through team-based projects and developed an understanding of the economics and consumer behavior that influences change as well as the competitive dynamics emerging in various industries. During this time, Florian’s team worked on utilizing blockchain technology to transform the Internet of Things into an Economy of Things. As team leader, he worked with different people, cultures, and viewpoints to succinctly develop and articulate their business plan.

One of Florian’s passions is working with cross-cultural teams. His experiences from Japan to Europe to the U.S., have familiarized him with the challenges and opportunities of communicating effectively across multiple backgrounds. In his free time, he likes to analyze Game of Thrones datasets to find insights about the complicated political landscape or visualize data from past battles.
When confronted with her first million-point dataset, Ruth knew a change had to happen. Although using Microsoft Excel’s pivot tables to reduce data was sufficient for her first eye-tracking publication, she realized that handling the growing volume of information she’d encounter required new tools. She took the initiative to learn R programming, a direction she certainly hadn’t foreseen while doing logic puzzles as a 9-year-old, but one that flowed naturally from her exploration-oriented mindset. With her newfound skills, she streamlined data reduction for another project’s cognitive tasks by a factor of over 300. These experiences drew her to analytics and exemplified her approach: “Leave the situation better than how you found it.”

Ruth started as a research assistant in the Psychology Department at NC State University, transcribing childhood memory interviews. Over time, she took on additional responsibilities, from teaching linguistic analysis software to leading a field team for a longitudinal bilingual education study involving nearly 1000 elementary school students. She most recently worked as a research specialist at Emory University, where she dove into the field of eye-tracking and gained a reputation for improving lab processes wherever possible.

Aside from academic leadership, Ruth has trained in martial arts for over a decade, beginning with Matsubayashi-ryu Okinawan karate and moving to traditional Tang Soo Do. She currently ranks as a first-degree black belt and has served as an instructor trainee, applying lessons learned on the mat to the office and vice versa. Ruth loves the process of word-crafting and can be found pondering how words relate to each other between and within languages—specifically Spanish and Japanese. As an outflow of this, she writes original songs for acoustic guitar and occasionally plays at open mic nights to practice her performance skills.
Persistence and precision are needed to land a flip on a four-inch-wide beam, four feet off the ground. Alex’s involvement in competitive gymnastics taught her the value in perseverance and hard work. As a senior cheerleading captain at Elon University with a “can do” attitude, she motivated the team to execute challenging pyramids that required teamwork and communication. Performing as a member of the cheerleading team in front of spectators has given Alex the confidence and ease to present and communicate results eloquently.

Growing up, Alex was always interested in mathematics and statistics. Alex could be found at the baseball diamond, meticulously keeping the scorebook and creating scouting reports for her brother’s baseball teams. A baseball statistics undergraduate class sparked a passion for analytics and a recognition for the power harnessed by analytical tools to solve problems and make decisions, on and off the field. She chose to pursue a degree in analytics because it seamlessly integrates her love for numbers and her zest for communication. Alex has developed a passion for data visualization and communication because without effective presentation of data, the conclusions will not incite change.

Alex always wears a smile. When not studying analytics, Alex enjoys making her crowd-pleasing “Slota brownies,” layered with Oreos and chocolate chip cookie dough. Her time is also spent searching for the best local restaurants and bakeries for inspiration in her own meals. She has passport stamps from Costa Rica and the Dominican Republic and hopes to add more countries soon.
Chris Steingass

Hometown: Manalapan, Florida
Language: German
Citizenship: U.S.

EDUCATION

- University of Miami
  J.D., cum laude, 2015
- Lynn University
  B.S., cum laude, Criminal Justice, 2011
- SAS Certified Base Programmer, 2017

Chris's journey into data analytics began, improbably, in law school. Law school provided Chris with the intellectual challenge and rigorous analysis he craved, and he thrived in an environment that empowered him to develop the highly analytical approach employed in tackling legal questions. Through judicial internships, particularly through one at the Supreme Court of Florida, Chris discovered his fascination for technical communication, and his passion for relating complex information to laypeople and experts alike.

Soon, Chris realized that applying his newfound analytical skills to legal issues left him wanting. Deep down, Chris felt a strong preference for drawing conclusions rooted in measurement and empirical observation, rather than based on authoritative proclamation. Analytics fit these requirements perfectly and allowed Chris to continue honing his skills in analysis and communication while rekindling his age-old love affair with everything computers.

Outside of work, Chris focuses much of his energy on exercise and nutrition; he can easily spend hours poring over a spreadsheet dedicated to the planning and tracking of the two. While Chris enjoys spending the occasional weekend competing in an obstacle race or running with friends, he often opts to recharge his batteries watching a Coen Brothers movie, discovering a new brunch spot, or soaking up some sun at a beer garden. A perfect day for Chris begins with a strenuous workout and ends with a good meal in good company.
Anne Marie Strickland

Hometown: Knightdale, North Carolina
Citizenship: U.S.

EDUCATION

- North Carolina State University
  B.S., *summa cum laude*, Business Administration, 2011
- SAS Certified Base Programmer, 2017

Anne Marie’s strong work ethic and ability to push beyond her comfort zone has earned her praise from peers and institutions alike. In undergrad, she was one of the top students in her class and was nominated to receive the Poole College Board of Advisors Outstanding Student award. Her experience studying abroad in Australia fueled her aspiration to work with and learn from people with diverse backgrounds.

Anne Marie spent four years working as an analyst at SAS in HR. There, she took part in many data-driven projects and, most notably, a complete overhaul of benefit offerings across 90 different countries. With a desire to tackle a greater variety of challenges and take on more responsibility, she was recruited by Cisco to manage the global benefits program. These experiences exposed her to the power of working with data to solve business problems. Anne Marie realized that gaining her master’s degree in analytics would allow her to expand her knowledge to be able to make a bigger impact in the world.

Her contagious enthusiasm and ambition to excel in life can also be seen in her personal endeavors. Growing up with an identical twin sister, Anne Marie was born with a natural competitive drive. She thrives in competitions that involve collaborating and succeeding in team environments. Anne Marie played on the drumline for marching band where she loved the challenge and camaraderie of performing on the field. More recently, she joined a running club and shared her triumph of qualifying for the Boston marathon with several friends, upon running their first marathon together.
Ty Stuelke

Hometown: Cary, North Carolina
Citizenship: U.S.

EDUCATION

- North Carolina State University
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Ty’s lifelong passion for games naturally led him to an interest in analytics. No matter if it were Pokémon or baseball, he quickly realized that all games have optimal strategies and techniques. Rather than solely relying on trial and error from his own experiences, Ty was always quick to use external resources to learn what tactics would best increase his chances of winning. After relying on the analysis of others to support his interests for years, Ty eventually came to appreciate the work done behind the scenes. He realized that his calling was to be a data analyst to help others enjoy their interests to the fullest, as he did.

During his time as an undergrad at NC State, he had his first hands-on experience with big data through a data science course jointly hosted by the Statistics and Computer Science departments. He used R and SQL to analyze Google’s Copyright Infringement database to determine which types of websites were most often and most likely to be guilty of infringing copyright, and what actions were taken against those violators. After cleaning the data, conducting a time-series analysis, and constructing a word cloud, he confirmed what he already was all but sure of—that data analytics was something he could see himself doing as a career.

Outside of his studies, Ty volunteers as a judge for high school debate tournaments, where he travels to high schools across North Carolina to offer constructive advice to competitors regarding their speaking presence and argumentation skills. He also has personally mentored students from Cary High School and Wake Young Men’s Leadership Academy to teach them strategies on how to develop sound arguments, and how to effectively present their case to an unknown opponent and judge.
Yuqing Su

Hometown: Zhengzhou, China
Citizenship: China

EDUCATION

- University of Miami
  B.B.A., magna cum laude, Finance with minor in Computer Information Systems, 2015
- SAS Certified Advanced Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017
- Chartered Financial Analyst (CFA) Level I passed

Yuqing’s journey down the analytics route began even before she realized it. Astonished by the predictive power of data in a college portfolio management class, she was eager to explore indicators that could forecast stock performance. After rounds of experiments, she managed to link stock close prices to their profitability. Since then, Yuqing believes that in addition to aiding businesses to make better decisions, data analytics also has the power to make the world a better place.

While working on the risk team in an asset management firm, Yuqing always strove to deliver quality work and to take on new challenges. Despite the exponential growth of trade transactions and workload, she did not shy away. Her determination with improving the process motivated her to build a margin estimation model through monitoring data on daily interest rates and price changes. The precise prediction of next-day collateral movement enabled the company to maximize cash utilization. Being proactive in addressing challenging issues not only brought Yuqing a strong sense of accomplishment, but also earned her manager’s trust. Yuqing independently supervised a $100 million loan project as a junior analyst after being in the role for only four months.

When her data mode is off, Yuqing indulges herself in the fantasy of art and food. An enthusiast for painting, she loves designing T-shirts and logos for cultural and social events. During the weekends, treating herself to a hot bowl of pork broth ramen can easily cheer her up or spending hours inventing a Napoleon Cake can also fill her day with joy.
Ricky Tharrington

Hometown: Goldsboro, North Carolina
Citizenship: U.S.

EDUCATION

- East Carolina University
  B.S., summa cum laude, Engineering, 2017
- SAS Certified Base Programmer, 2017
  SAS Certified Statistical Business Analyst, 2017

Ricky’s passion for discovering and sharing information with others developed during his time working with XBee wireless radios in an undergraduate research lab. He designed electronic instruments to wirelessly measure the heart rate, body position, and skin conductivity of hospital patients. Writing the software to process the physiological data collected from these devices was his first experience processing data programmatically. During the 2017 Research and Creative Achievement Week at East Carolina University (ECU), Ricky received an award for best poster presentation for his work.

At ECU, Ricky honed his interpersonal and communication skills while leading a team of physics tutors at the Pirate Academic Success Center and serving as the Speaker of the Senate for the Student Government Association. Redesigning a heating, ventilation, and air conditioning system for Purdue Pharma in Wilson, NC for his undergraduate engineering capstone project taught him how to work effectively in a team environment and demonstrated the importance of project management skills. While studying abroad in Peru, Ricky gained experience in experimental design and a stronger appreciation for a different culture. He hopes to put his communication skills to good use in his professional career and help facilitate strong, cohesive teams.

Ricky spends free time outdoors, working on side projects, and socializing with friends. He spent two summers working as a maintenance technician for an apartment complex in his hometown, and regularly practices his woodworking, painting, and structural design skills on weekend projects renovating houses with family members. As an Eagle Scout, he enjoys camping and hiking—which he applied to his internship at GoScience in Greenville, NC in planning and instructing a wilderness survival course for middle school children.
After years of expanding her knowledge and experiences in the social sciences, it was the 2016 Rio Olympics that ultimately sparked Lucia’s interest in analytics. As a researcher for the Laboratory for Analytic Sciences—a National Security Agency translational research lab—Lucia leveraged data from social media and other foreign sources to provide situational awareness of Brazil’s sociopolitical landscape and anticipate threats in the country. These efforts resulted in a comprehensive database that has served as the foundation for various research projects. For example, along with her subject matter expertise and in collaboration with researchers at IBM, these data contributed toward the development of a stochastic model for simulating social protest that will be presented at the 50th Annual Winter Simulation Conference. As part of the team working on the Olympics mission, Lucia was subsequently nominated for the National Intelligence Meritorious Unit Citation Award for a performance of significant benefit to the Intelligence Community (IC).

During her graduate studies, Lucia was awarded opportunities to present her research in multiple settings, and was hand-selected to participate in a prestigious IC-sponsored seminar where she worked in a team to “solve” a simulated terrorist threat, among other exciting activities. Upon obtaining her Master’s degree, Lucia was designated a 2017 Finalist for the Presidential Management Fellowship. She is now eager to merge her knowledge in the social sciences with her expanding skills in analytics, and hopes to one day apply her talents in a position of leadership.

An avid world traveler, Lucia has visited several countries throughout Europe, the Middle East, South America, and the Caribbean.
Kirsty’s inquisitive nature and passion for serving others has been a guiding light throughout her life. As an undergraduate, she excelled in using this passion for discovery in a quantitative genetics research laboratory. For her hard work in designing experiments investigating aggression and lifespan, she was awarded with Sigma Xi’s Undergraduate Research Award. She applies her enthusiasm to everything she does. As a research technician after graduation, Kirsty led research projects and thrived in the process of making the data gathered relatable through revealing the story underlying the statistics.

Kirsty has a passion for using her talents for social good. In her leadership as service director for her community service group at NC State, she planned dozens of outreach events each semester and led the chapter to its first national service award. Kirsty also volunteers as a Crisis Counselor for Crisis Text Line, a text-message based suicide prevention hotline. She was fascinated with how Crisis Text Line used text analytics to pull vast amounts of data from each conversation and how machine learning helped triage and reach the highest-risk users faster. With data science, Kirsty saw how she could combine her inquisitive nature from working in research with her passion for helping others.

Outside of analytics, moving across the Atlantic Ocean several times as a child grew her ability to adapt and fostered her love of travel. She enjoys being immersed in new cultures, like when she studied abroad in Hangzhou, China. For fun, Kirsty enjoys cooperative board games, dancing away stress in Zumba classes, and dreaming up names for the dog she plans to adopt after graduation.

Kirsty Ward

Hometown: Apex, North Carolina
Citizenship: U.S. and U.K.

EDUCATION

- North Carolina State University
  Graduate Certificate, Applied Statistics and Data Management, 2017
  B.S., cum laude, Genetics with minor in Psychology, 2014
- SAS Certified Advanced Programmer, 2017
- SAS Certified Statistical Business Analyst, 2017
Eric loves “wicked problems.” He enjoys learning about their nuances, imagining creative and pragmatic ways to solve them, and mulling over how to best communicate those solutions. This love for wicked problems led Eric to pursue a master’s degree in public policy. The breadth and complexity of public-sector problems fascinate Eric. While the natural world often adheres to strict mathematical laws, human communities do not. Using data, Eric hopes to better understand human behavior so that he can help develop innovative and objective solutions to address the big, complex problems that affect everyone.

Although Eric’s interest in solving complex problems dates back to playing Equations in elementary school, his interest in data is more recent. As a marketing analyst at a DC law firm, Eric taught himself how to clean and mine data using the firm’s unused customer database. He then used his insights to convince the firm’s less data-inclined partners to greenlight, among other initiatives, targeted ads and website alterations. Implementing data-driven solutions helped the firm increase its training service revenues by 63 percent. This success opened Eric’s eyes to the power of data. As a graduate student, Eric went on to conduct sales tax simulations for the North Carolina Office of State Budget and Management and contributed to Durham Public School’s redistricting optimization efforts.

In his free time, Eric likes to watch Michigan Football, analyze and model sports data, gather with friends for board games, and play fantasy sports. He has also recently taken on another wicked problem: walking his two cats. He is not yet close to a solution.
On the first day of Caroline's intermediate accounting class, the professor looked at the roster, saw Caroline's name, and announced that she was the first human relations major he had ever seen in an upper-level accounting course. This observation revealed that she was interested in two uncommonly paired skills: interpersonal dynamics and number crunching. With a major in human relations and minor in accounting, Caroline’s homework assignments spanned from designing change management workshops and understanding Myers-Briggs personality types to creating balance sheets and reviewing corporate financial statements.

During her role as a project administrator for Lincoln Financial Group, Caroline continued to fuse her two diverse interests. She found opportunities to leverage her interpersonal skills by resolving conflicts in team meetings and communicating effectively to obtain time-sensitive deliverables from colleagues. Her analytical skills inspired her to capture project metrics measuring time, cost, and scope changes. She also established a monthly meeting with project stakeholders to share her insights. Upon her graduation from the Institute for Advanced Analytics, Caroline plans to continue combining her soft skills and her refined technical abilities to serve as an analyst who can excellently collaborate with coworkers, lead diverse teams, and communicate data effectively.

Caroline is an avid fan of NBC's television series *The Office* and is prepared with a quote or reference for any situation. She is also a connoisseur of quality coffee and spent a year working for a coffee roaster in Greensboro, North Carolina where she learned to appreciate the flavor profiles of various origins and blends. In her free time, Caroline enjoys playing the piano and crafting with her sewing machine.
Growing up, Tian always excelled in math, routinely scoring highly on standardized tests and placing into top schools. During her undergraduate studies in China she developed a more focused interest in statistics and manipulating data. Tian’s adventurous attitude led her to pursue her master’s degree in applied economics abroad, where she had the opportunity to utilize programming to analyze data. Developing these skills and conducting research within her economics program, Tian realized the impact of data analysis and gained an appreciation for how analytics can be used in critical decision-making. Tian’s research involved using probit models to predict SNAP participation based on various demographic factors. The results of her analysis can be used by the government to improve the effectiveness of social welfare programs.

Pursuing her passion for data and analytics, Tian began working as a data analyst for Brightlink Communications. There, she was immersed in data mining and analyzing client trends in usage and rates. This experience gave her the opportunity to closely work with raw data, which helped to further develop her analytical techniques and skills. Her talent for analysis and drive to aid critical decision-making motivated Tian to pursue data analysis at the Institute.

Tian is positive and cheerful about everything she does, always with her signature smile. She is a self-taught skier and enjoys traveling around the world to ski new places. She has skied the courses from the 1960, 2002, and 2022 Olympics across the U.S. and China. She is passionate about trying new and unique foods while traveling, which gives her inspiration for her love of cooking. Her specialties include spicy dishes from her native China and sweet desserts.
Liping Wu

Hometown: Jiangxi, China  
Language: English, Chinese  
Citizenship: China

EDUCATION

- Renmin University of China  
  M.A., Comparative Literature, 2007  
  B.A., Chinese Language and Literature, 2005
- SAS Certified Advanced Programmer, 2017  
  SAS Certified Statistical Business Analyst, 2017

A passionate learner, Liping took classes in advanced mathematics and data analysis while studying literature in college. After graduation, she combined her affinity for numbers and her love for literature by working as a sales manager at Renmin University Press—one of the most prestigious academic publishing houses in China. Liping took an unconventional approach to boosting sales in the traditional publishing industry, using data analytics to increase her personal gross sales by 95% from 2007 to 2008, a staggering number when compared to the department level of 63%.

After realizing the potential applications of analytics in her line of work, Liping looked toward the data science community for inspiration and found a role model in Dr. Hans Rosling. His acumen and passion in discussing the dynamics among women’s education level, labor market engagement, and economic growth ignited Liping’s career dream to become a data scientist. Liping seeks to leverage the tremendous power of data not only for generating profits in business, but also for improving understanding of the world and building a better society, as a whole.

Optimistic, versatile, and diligent, Liping brings positive energy to any group she works with. She offers a strong set of storytelling tools through her six years of study in Chinese and comparative literature.

When Liping isn’t turning data into decisions, she loves to spend time with her husband and two sweet boys, exploring museums and parks. She also enjoys hosting family feasts and having delicious Chinese food with friends.
Polly’s excitement for data analytics was ignited and fueled through the lens of finance. Her first encounter was through her sector lead analyst role at Tufts Financial Group, a student-run investing club. By modeling financial metrics in depth, Polly led the most advanced sector in the club to optimize a bank stock target price and contribute to the club’s portfolio positive returns. Feeling empowered by the rich insights data could provide, she declared a second major in math her junior year and also took advanced computer science courses, such as algorithms and numerical analysis, to equip herself with skills from multiple disciplines.

Believing in the notion that data analytics should serve a practical purpose, Polly participated in Upgrade Capital’s competition to apply her knowledge to real financial problems. For the competition’s screening step, she decomposed stock portfolio returns using Principal Component Analysis and identified major risk factors in the portfolio. Currently, she is working on using topological data analysis to draw insights from economic regime shifts and to address questions that concern financial practitioners.

Aside from being a financial data enthusiast, Polly is fascinated by fitness and nutrition after taking a nutrition class in college. When she isn’t found running at Lake Johnson preparing for a half marathon or in Carmichael Gym doing strength training, Polly is spotted in the kitchen exploring healthy meal recipes and inventing her own nutritious, savory dishes.
From an early age, Kyle’s competitive nature manifested itself on the baseball diamond, and his love for the sport led him to the baseball team at Augustana College in Illinois. His experience at Augustana gave him a knack for leadership and an appreciation for teamwork. As Kyle’s interests transitioned from athletics to academics, he found a new way to satisfy his undying need for self-improvement through mathematical modeling. Kyle developed a model for predicting fantasy football performance for quarterbacks and subsequently presented his work at a national mathematics conference, the Mathematics Association of America’s Mathfest. Motivated by the feedback he received on his presentation, Kyle revamped his approach and returned to present an improved model at later conferences.

At Mathfest, Kyle discovered The Master Algorithm—a book about machine learning that consumed him when he wasn’t developing web applications for 38th Street Studios, a technology consulting startup. While working at the company, Kyle realized the potential of pairing advanced technology with analytics. The Master Algorithm acted as a catalyst for his work and personal projects, sparking a newfound interest in data analytics, a field that blends his passion for math and technology.

Kyle’s appetite for improvement bleeds into every part of his life—from hiking the Rocky Mountains to trying new sports like tennis and fly fishing. In Kyle’s downtime, he enjoys cheering on his favorite sports teams, the Colorado Rockies and the Denver Broncos, and he hopes that the Rockies can share some of the Broncos’ recent success.
Instead of reading stories before bed when she was young, Suzanne enjoyed learning long division from her mom. She has always seen the world in terms of numbers, which has helped her stay organized and tackle problems in a systematic way. As early as high school, Suzanne became fascinated with the idea of taking an immense amount of available data, and using it to forecast the future. Thus, Suzanne tailored her undergraduate career to give herself as much educational and extracurricular analytical experience as possible. This led her to pursue positions with SAS and Chiltern International, coauthor two research papers, and build connections with analytical professionals along the way.

Suzanne thrives off these personal connections. Finding out what makes people unique helps her find passion in others, and within herself. Suzanne has cultivated this talent through the interactions she has had throughout her academic and work experience. From peer tutoring in college, to personal or virtual meetings with managers and work teams, to extracurricular leadership/followership positions, Suzanne has continued to hone her workplace communication skills.

Her versatility extends across country borders and languages as well. Suzanne loves embracing other cultures and languages and believes that cherishing our differences is the key to collaboration across social barriers. This led her to travel to 17 countries by the time she was 20 years old, and to study abroad in Ecuador for a semester—which cemented her desire to use her communication skills, language knowledge, and technical background together to pursue a career in analytics.

In her free time, Suzanne enjoys spending as much time as possible with our furry, four-legged counterparts and also with close, human friends. She loves trying new restaurants or recipes, especially for dessert, and enjoys being near any body of water whenever possible.
For a self-motivated dynamo and a goal achiever, dedication comes naturally with a strong will. Cindy demonstrated her vigor and diligence by passing all the sections of the CPA exam within six months. Since childhood, Cindy was eager to seek answers for “why” and “how” questions. She enjoys digging through layers and revealing the structures underneath. Unsurprisingly, those traits led her to become interested in data analytics, whose beauty is built on logical patterns.

Upon college graduation, Cindy joined a leadership program in Fullerton Financial Holdings. During the rotation, Cindy was able to take ownership of creating portfolio dashboards and communicating data-driven suggestions across departments. Determined to pursue the trend of harnessing big data in the finance industry, Cindy transitioned into a project to launch an online consumer finance company. Together with the team from Bank of Paribas, she helped to build the firm-wide credit rating model utilizing clustering analysis and tree models. Further realizing that being a good data scientist is not only analyzing data, but also about creating real values in the business world, Cindy joined a MBA program to enhance her soft skills. With strengthened communication and strategic thinking abilities, Cindy was able to successfully provide easily understandable and robust data driven solutions for comprehensive business problems.

Besides spending most of her time honing skills found in the data scientist’s toolbox, Cindy devotes her enthusiasm to animal welfare. She has spent over five years volunteering in different animal shelters. Cindy also loves shopping. She is a fan of simple but elegant designing—just like her taste for data visualization styles.
As a competitive child, Ayesha was drawn to mathematics and how it could be applied to win against her brothers in their favorite board games. She remembers drawing out moves and strategies to get the most marbles in Mancala, keeping in mind her younger brother’s tendency to stick with the same moves. Even at a young age, Ayesha learned to practically apply mathematics to the world around her.

Ayesha was first introduced to the educational value of analytics as a student at UNC’s Gillings School of Global Public Health, where she learned how it is used to understand and improve health outcomes globally. She was fascinated by topics such as precision medicine, which uses genomic data to personalize medications for individuals, and air pollution monitoring, which uses visualizations to monitor and forecast air quality. After seeing the power of analytics and how it could quantify impacts of healthcare innovations and policies, Ayesha wanted to put analytics into action.

As an intern at Allscripts, an electronic health record company, Ayesha gained hands-on experience with the business application of analytics. There, she used analytics to support business intelligence by collecting and analyzing client-centered data on various products, such as “eAuth,” which allows for electronic prior authorization of medications. Through her experience at Allscripts, Ayesha gained valuable skills not only in utilizing data for business strategies, but also working in teams and with clients.

Ayesha has a huge sweet tooth, so you can often find her baking a pumpkin cheesecake—her favorite dessert. She also loves spending time with her friends and family outdoors by playing frisbee or going rock climbing. Of course, she still enjoys playing board games with her brothers.