2022 Student Profiles

Kaitlyn Gordon, Mississippi State University

Kaitlyn is a graduating senior majoring in Agricultural Engineering Technology and Business, with concentration on precision agriculture and surveying and geomatics. Her journey in agriculture was one she never foresaw, and almost never experienced. Early in high school, she was assigned a course called "Beginner Agriscience" because it was the only one that was available. Reluctantly, she took the course – and she's never looked back.

"I became highly involved in FFA and enrolled in any ag course offered," she recalls. "I could not get enough of the subject. I fell in love with all things agriculture and knew I wanted to continue being involved in it."

Her enthusiasm and drive for excellence has continued through her college work, says Alex Thomasson, Agricultural and Biological Engineering department head at Mississippi State. He started at the school in the summer of 2020 and was keen on reconstituting a student chapter of ASABE. "I reached out to the students in my department in fall 2020, and Kaitlyn was one of the few who stepped forward, not only volunteering to join the new student club, but to take on leadership responsibility, to commit time and effort to the endeavor, and to share ideas on how to be successful with it. Kaitlyn is very bright, an excellent student, a kind and sociable person, and she is willing to lead and to serve.

Amiyah Hunter, University of Northwestern, St. Paul, MN

Amiyah is a graduating senior majoring in Computer Science and minoring in Social Justice. Although her college of choice does not feature agriculture course offerings, she applied and was accepted for multiple technology internships at Land 'O Lakes.

Gary Hicks, Land O'Lakes IT Director – Ag Retail IT Solutions and Amiyah's GTAC sponsor, was impressed with her authentic communication style and ability to engage in deep conversations and questions. "She has a unique combination of technical focus and the ability to have great interactions with businesses about technology and how it can add value. This came out clearly in her Land O'Lakes summer internship, as both her performance and teamwork skills were noted as outstanding."

Amiyah has accepted an offer to join Land O 'Lakes full time in the IT Talent Acceleration Program, and she is excited to learn more about the myriad aspects of agriculture that will be represented at the AgGateway Annual Conference.

"I look forward to attending the Conference to gain so much more knowledge, skills, and experiences that I can take with me in the beginning stages of my technology and agriculture career," she says.

About the Conference experience, Kaitlyn adds that “having the chance to learn about different businesses and meet people from each will be greatly beneficial as I begin to prepare for graduation and everything that comes after.”

Derek Kinney, Iowa State University

Kinney is a junior pursuing a double major in Business Analytics and Finance. While his family did not farm, he grew up in a small town and saw firsthand the importance of agriculture to rural communities. “The advancement of agriculture has always been interesting to me,” he says.

This past summer, he had the opportunity to explore the industry through an internship with Land O’Lakes. His advisor Gary Hicks recalled that “when we recruited Derek for his internship, he was in his sophomore year, and ninety percent of our internship recruits are juniors. During that recruiting process, Derek showed a maturity, communication style, and authenticity that was beyond his years. I believe Derek’s key strength is in his networking and caring for the personal connections and relationships he develops. This energizes Derek…it’s his passion.”

Kinney is deeply involved in university activities, including the Honors Program, peer mentoring for College of Business freshmen, the Ivy College of Business Student Council where he serves as Treasurer, the Gerdin Leaders Academy, and the Iowa State President’s Leadership Class. He also studied abroad in Seville, Spain this past winter.

“This grant and conference experience will be a wonderful opportunity for me to make many new connections, learn from some of the most influential professionals in the industry, and gain a better understanding of how technology is continually helping to make breakthroughs in agriculture,” says Derek.

Cori Lee, The Ohio State University

Lee is a graduating senior majoring in Sustainable Plant Systems Agronomy at Ohio State. Lee grew up on the family corn and soybean farm, she came to the university with a keen interest in agronomy, which developed into a passion for precision and digital agriculture.

“Since arriving at Ohio State, Cori has worked in our Digital Agriculture Program supporting our research and Extension efforts,” says her advisor and sponsor, Dr. John Fulton. “She has been a valuable asset and leader for several projects, most notably supporting our eFields program.” Much of the university’s digital ag research falls under eFields, providing Cori with direct experience collecting data from a variety of sources that is summarized and published annually as the eFields Report.

“I have enjoyed being able to be a part of this team in publishing the annual eFields Report,” says Lee, “which features over 200 on-farm research trials in all regions of Ohio. In addition to the eFields program, I have been able to research, document, and compile precision ag technologies for extension and education purposes. I am proud to be able to support the land-grant mission by promoting these technologies to farmers and industry professionals through the website and newsletters.”

Lee hopes to expand her knowledge of digital agriculture and connect with professionals at the AgGateway Annual Conference, and better understand the problems farmers are facing today and how they can be solved with available technology.

“This conference will give me a better understanding of current gaps in the industry and what solutions we can use to bridge them, even if those solutions may not exist yet,” she adds.

Raul Sebastian Martinez, Texas A&M University

Martinez is a master’s student in the Biological and Agricultural Engineering department. His passion is “smart farming,” in particular big data-driven systems for crop production. “I had numerous experiences with agriculture during my undergraduate career that continuously reminded me of the benefits and advantages of studying the patterns that nature tends to follow. These projects and experiences repeatedly referred to the topic of smart farming.”

Martinez currently work as a research assistant under the supervision of Dr. Robert G. Hardin at Texas A&M as part of a team of graduate students, research assistants, and faculty. His role has provided good background as he works through his current thesis project, “Variety Trial Validation: A Framework to Incorporate On-Farm Data.”

The starting point of this project was a variety trial database provided by Cotton Incorporated, and the first challenge he encountered while working with this database was the lack of standard data formats.

“I established at an early stage of the project the need to develop algorithms capable of exchanging, accessing, and understanding data with different formats,” he says. “This was necessary since my vision for this system's operation is to interface with existing weather and crop management systems.”

At the Conference, Martinez hopes to learn more about the future of data connectivity in agriculture and expand his professional network with a goal of conducting research on the achievability of syntactic interoperability of environmental and crop management systems with the objective of developing predictive models using on-farm data.

“My post-conference plan is to utilize my data analysis and problem-solving skills in a role affiliated to the development of smart management systems capable of collecting data and predicting crop’s productivity and quality.”

Carley Rorhbaugh, Colorado State University

Carley is currently a master’s candidate in the Horticulture and Landscape Architecture department at Colorado State and is on track to graduate in 2023. She received her bachelor’s degree in Horticulture and Psychology from Texas State University in San Marcos.

After graduation, Carley worked on an organic farm as a farmer’s assistant and led weekend markets. “My time spent on the farm included many tasks from greenhouse support, seed starting, mending drip lines, fertilizer scheduling, livestock feeding, and customer service. My experiences as a farmer and a researcher have offered me much appreciation in the entirety of agriculture.”

At CSU, she recently completed two experiments involving Nutrien Ag Solution's ESN slow-release nitrogen fertilizer. "My research objective is to study various nitrogen fertilizer applications on tomato plant development and soil microbiome assembly," she explains. "The goal of my research is to identify if controlled release fertilizer affects the soil microbiome at the same rate as quick release nitrogen fertilizer."

Carley is looking forward to attending the Annual Conference to learn about the various industries involved in the agricultural business sector. "I am interested in working for a company that makes more environmentally friendly or organic products for large scale farm production or working as an agricultural Extension agent promoting education."

Daksh Shah, University of Illinois, Urbana-Champaign

Daksh is a second-year graduate student pursuing a master's degree in Information Management. His areas of study have included data visualization, data warehousing and business intelligence, database administration and scaling, where he learned new strategies, tools. and technologies for analyzing and visualizing data.

He is currently working as a Data Engineer Intern at Syngenta, where he is responsible for integrating its simulator code to work on any operating system via Python programming. "I have also composed a stored SQL procedure for Syngenta's conversion metrics in Snowflake, he says. "And I am investigating and learning several AWS services to figure out a better workflow for Syngenta's 'Veg Smart Digi Plant' project."

By attending the AgGateway Conference this year, Daksh aims to "build a fruitful network with the industry executives and decision makers by engaging in conversations with them to determine the future of data connectivity in agriculture. I'll gain valuable insights from them and get a deeper understanding about the field of agriculture and how can we connect data with it efficiently."

Ketan Shende, Kansas State University

Shende is a PhD student, specializing in agricultural engineering. As a city kid growing up in India, he admits to not being very aware of the challenges and opportunities in modern agriculture. In his second year of pursuing his master's degree, he came across agriculture technology in his coursework, and it changed the trajectory of his pursuits.

"Compiling all my knowledge that I have gained so far through my bachelor's and master's I want to dedicate every piece of skillset that I have to improve farming as an occupation and portray it as a profitable profession," says Shende.

His PhD work is pursuing the development of a wireless data communications system for multiagent robotic platforms. "The project is closely related to autonomous farming systems which will soon replace the single machinery operations, says Kansas State Professor Dr. Ajay Sharda, his advisor and sponsor. "Right from performing the literature review for various wireless communication systems

currently available through developing a working model for simulated data, he has worked meticulously towards gathering maximum information possible.

“Ketan is dedicated towards developing innovative solutions to enhance farming practices,” Sharda continues, “and contributing his efforts to address the data and wireless connectivity issues that the growers are currently facing.”

“By participating in AgGateway Annual Conference, I want to learn as much as possible about the latest innovations happening in research and industrial domain pertaining to developing products that comply on interconnectivity and data standards,” says Shende. “By meeting individuals who have done exceptional work in this space, it will definitely give me a golden opportunity to network with them and stay up to date with the latest innovations.”