

THE JOURNEY

WINTER 2019



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INTERNATIONAL INTERSHIPS
the Best of the Best

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BLOCKCHAIN BARBIE
Shatters Perceptions

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BACK TO THE FUTURE
Career Advice to My Younger Self



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BEYOND THE EXPECTED.

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— welcome —

When I first came to Miami as an accountancy student, there were two semesters—fall and spring. A small percentage of students—the “go getters” and those trying to catch up—enrolled in summer term classes. Now hundreds of students choose to attend year round. For some, it’s a way to complete a double major or add a minor. For others, it’s a chance to study abroad or say “yes” to a hands-on learning opportunity too good to pass up. An example is our just-completed winter term, where hundreds of students enrolled in one or more of the dozen courses offered at the Farmer School, four different study abroad and five study away (U.S.-based) options.

Our students’ thirst for knowledge and their willingness to trade “down time” for additional, innovative learning opportunities helps to ensure that Farmer School students graduate beyond ready to begin their careers. That’s a key reason that employers are so eager to hire our graduates. This is one of the factors that resulted in our recent ranking by Poets & Quants magazine as the number 17 public business school in the country and the top business school in Ohio.

The rankings were based on three equally-weighted criteria—admissions standards, student experience (based on an alumni survey) and career outcomes (percent of students with internships before graduation, percent of students with full-time jobs within three months of graduation, and average salary and signing bonus).

Spring term classes are now in full swing, including Miami’s first-ever blockchain class. It’s one of only a handful of such courses available to undergraduates on any college campus, and students from across the university were eager to sign up. We’re not surprised by the popularity of the course—the Miami University Blockchain Club, founded less than two years ago, already has nearly 200 members.

While many might stereotype technology gurus as male, two of the stories in this issue prove that to be false. Sarah

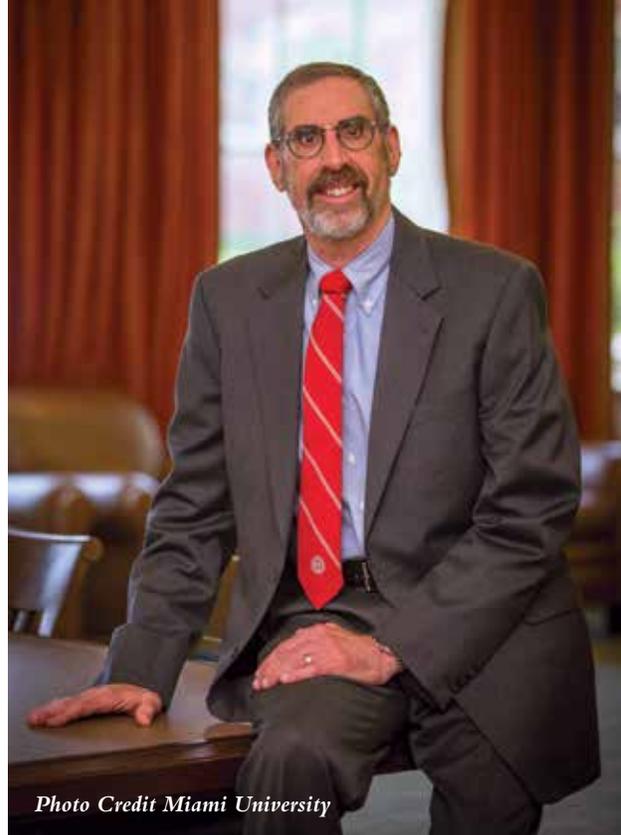


Photo Credit Miami University

Nather '10, talks about her civilian job with the Department of Defense and senior Dana Schwartz shatters perceptions as an internationally-known blockchain expert.

Just as blockchain will fundamentally change the way the world does business, Information Systems & Analytics (ISA) assistant professor, Fadel Megahed’s research on workplace safety has gained widespread industry acclaim for its potential to reduce accidents and increase productivity.

Congratulations also to Dr. Sooun Lee, professor of ISA, who received the university’s 2018 John E. Dolibois Faculty Award for Innovation in Global Programming after a nomination process and award committee recommendation.

Noticing a trend? The focus of this issue of *The Journey* is technology, with the ISA department in the spotlight, so a majority of the articles tie to technology, and how we are leveraging it, in and out of the classroom. I hope you enjoy it!

Love and Honor,

Marc Rubin MU '75

Dean and Mitchell P. Rales Chair in Business Leadership

BLOCKCHAIN COURSE a First

If the first thing that comes to mind when you hear “blockchain” is “bitcoin” or “cryptocurrency,” Arthur Carvalho says he isn’t surprised. What may surprise you, he says, is just how much more impact it could have on certain aspects of the business world.

“What blockchain allows is for companies and organizations to come together and, to a certain degree, share infrastructure among themselves,” the assistant professor of information systems & analytics and Dinesh & Ila Paliwal Innovation Chair explained. “In the past, big names like Google, IBM and Microsoft worked alone, but the new technology allows them to have a distributed database where they can actually start sharing things in a very secure way.”

This semester, Carvalho is teaching a new blockchain course—one of the first undergraduate-level blockchain courses that any school has offered.

The course is the result of two influences. One is how blockchain, its perception, and its tools have evolved over the last couple of years, Carvalho said. The other was a request from members of the student-created Miami University Blockchain Club, who came to him and asked for some sort of formal education to complement what they were learning on their own. “That opened our eyes a bit, and it had some influence on the decision to develop the course,” he noted.

Miami University allows departments to create “temporary” courses that don’t have to go through the full new curriculum process. “That allows us to be more responsive to students’ needs and also allows us to try out things quickly,” explained Dr. Barnali Gupta, Farmer School associate dean for curriculum.

“The first part of the course will go over the specific technologies and how they come together to create blockchain. The second part of the course will be the business part of the course, where we talk about applications,”

Carvalho said. “Traditional cryptocurrencies, of course, but beyond those, we talk about blockchain and elections, we talk about blockchain and supply chain, we talk about blockchain and health care applications. And we’ll have experts from the industry coming in to talk about other applications of blockchain.”

Carvalho notes that an important part of the class will be separating reality from the hype around blockchain. “We hear that blockchain is bigger than the Internet, something I sometimes laugh about—that makes absolutely no sense. We hear that blockchain will solve hunger, poverty, and these statements do no good, to be honest,” he pointed out. “Blockchain is incredibly useful for very specific applications. It’s not going to solve all the problems that we have on the Earth right now, but it can solve particularly complex problems.”

While blockchain is an information systems technology, Carvalho says non-ISA students can and will get something from taking the class. “I’m not trying to oversell the technology, ***but inside the business school, I think every single major can benefit from the technology.***

Supply chain will be a huge place for blockchain. Accounting will have new auditing processes, so it’s going to be huge there as well. Cryptocurrency is just one small area in which blockchain can impact finance. There are potential applications in every Farmer School major.” 





INTERNATIONAL INTERNSHIPS

COMBINE THE BEST OF THE BEST



The Farmer School is one of the country's top schools for study abroad participation. Approximately two-thirds of all Farmer School students have an international experience during their time at Miami, ranging from semesters in Korea to summers in Spain and winters in Australia. Most of these trips abroad have students taking classes at partner universities while learning the culture and business aspects of the region they visit. The school is also a strong advocate for the value of internships, with more than 90 percent of students graduating with at least one internship experience.

So it shouldn't be a surprise that one of the programs offered by the Farmer School Global Studies office provides students with the opportunity to do both at the same time. Students can work as a winter or summer intern at businesses in Shanghai and Hong Kong, and the eight-week program's cost to students is mostly covered by a generous fellowship.

"It's an opportunity for students to do an international internship before they would go into their junior-year internships. They intern in companies ranging from a four-person startup all the way to a major finance corporation," said Nicole Collins, director of global business programs for the Farmer School. ***"Students absolutely rave about it. They gain all sorts of professional skills, plus they get international experience which helps them stand out among their peers and their non-FSB colleagues."***

That's what information systems and analytics major Sarah Armstrong discovered when she interned at a small human resources company in Shanghai in the summer of 2017. "I transformed their decades-worth of financial data on Excel into a database. I created the database using a technology I learned about in one of my ISA classes at school. I also got to work directly with the IT director, and I learned so much from his years of experience in the field. The database turned out to be a huge success and the company still uses it today!"



Armstrong admitted that the whole thing was a little disconcerting at first. "I had just changed my major to information systems the semester before I went to Shanghai and was placed in a very technical role. I was absolutely terrified because I had only taken two ISA classes and didn't have much coding experience yet," she recalled. "But I learned on the job and it solidified my interest in the technology field. It also made me realize that in the future I want to be at a company with a large emphasis on technology so I can learn from other experts and get my hands on more up-and-coming technologies."

For Chase Bettner, a summer in Hong Kong helped him decide what path his career would take. "I was paired with Engel & Völkers Hong Kong, a hybrid residential-commercial real estate firm that specializes in sales and leasing of high-end condominiums and apartments," he said. "I absolutely fell in love with the tangibility of the real estate industry and the people I worked with, and once I got back in August, I made it my mission to secure another internship working in commercial real estate."

"The people I met, the experiences I had, and the memories I made have all seriously impacted me so much deeper than any other experience I ever could have and I am eternally grateful for the opportunity," Bettner added. "I can safely say that ***working and living in Asia forced me out of my comfort zone and made me much more comfortable being alone, being unfamiliar, and being myself in any given situation.***"

For Miami students who are U.S. passport holders, much of the program's cost is covered by \$5,000 to \$6,000 grants from the Freeman Foundation. "Where a lot of these international internship programs cost students more money than they're willing to spend to go somewhere and do work for someone else, the grant allows them to do it without digging into a financial hole," Collins explained.

The internships can also become part of the China Business certificate program, in which students take a language component, a China business component, and an international experience. "It's a great pairing with the internship because they gain the knowledge here and put it into use in a very tangible way when they go to Shanghai or Hong Kong," Collins said.

"Shanghai and Hong Kong offer professional experience in areas where almost every business in the world is working, and getting experience in these locations where so many operate is not only good for their future, but ***it gives them the opportunity to learn resiliency, to learn flexibility, to learn how to operate in a different culture and to navigate different types of experiences,***" Collins said. "So even if they never work in China again, they will still gain really valuable skills for future employment."



"The work environment really demonstrated the importance of a global perspective in the workplace and I now have a much greater appreciation for the global economy," Bettner said. ***"This experience, without a doubt, was the most formative time during my four years at Miami and I will endlessly recommend this program to anyone remotely considering it."***

"My Shanghai internship really set me apart from my peers, and every interviewer is always blown away that I had the courage to do an internship in China and the amazing things I did for my company while I was there. I definitely attribute my China internship for the countless offers I received for the next summer," Armstrong remarked. "I even had large companies like Microsoft and Amazon coming to me asking me to apply for a full-time job after seeing my résumé with China on it. Do it for the unique experiences and memories, but also do it to launch your professional career." 🇨🇳



HANDS-ON **LEARNING**

HANDS-DOWN **WINNER FOR STUDENTS**





Rich Michalik, Ethan Retcher, and Ki Sakuma were the research team.

Teams from colleges across the country pitch an equity, long or short, and are evaluated on quality of idea, analysis, and presentation. Teams that advance to the final round have 15 minutes to give/sell their recommendation to a panel of judges and all the attendees.

“We were disappointed to miss out so narrowly on the main prize and recognition that comes with first place, but felt that we performed to the best of our abilities.” Slade said.

For the first time, a Farmer School team entered the AT&T National Sales Competition. Team members Allison Hess, Aleah Sexton, Lauren Boyd, Levent Yurdum, Jack McNelis, and Blake Cortez leapfrogged dozens of other colleges to make the finals.

“We as a team went in feeling confident in our ability but still unsure about the whole situation. Despite all this, we gave a stellar performance,” McNelis said. “We were very cohesive and played off each other very nicely, and where one person needed help, someone else would jump in and give a great answer.”

The annual West Monroe Partners case competition saw Farmer School teams place first and third this year. Tori Lineweaver, Mariana Galiga, Jonathan Tetric, and Nicole LaBelle took first, while Becky Seiler, Meredith Haught, Claire Galberg, and Tommy Weidner won third.

••• Hands-on experience is one of the qualities that makes Farmer School graduates so highly sought after by recruiters. Intra- and intercollegiate competitions allow our students to apply what they have learned and test their prowess against other students and professionals while honing their time management, team and presentation skills. They’re in it to win it, and, quite often, they do.

At the Blockland Hackathon in Cleveland, Jack Gilcrest, Dhairya Desai, Ashton Barger and Karan Gupta took first place among colleges and third place overall behind two teams of information technology professionals. Unlike many competitions, where teams have a specific issue or problem to solve, in this scenario, the Farmer School team worked to create a new product or service out of blockchain technology.

“We blew away the judges and were able to accomplish things I never thought possible in two days,” Barger said. “We will definitely continue to do projects and hackathons together in the future.”



Engage Undergraduate Investment Conference

In the 2018 ENGAGE Undergraduate Investment Conference stock pitch competition, the team “Farmer’s Five Forces” reached the finals and came in second, the third Farmer School group to do so in the competition’s history. Joe Braun, Tori Lineweaver, Garret Markey, Noah Slade, and Jake White comprised the presentation team, while Justin Campana, Brenna Driver, Evan Jones,



West Monroe Case Competition - 1st Place Team



West Monroe Case Competition - 3rd Place Team



Blockland Hackathon

“It’s a great way to apply what you learn in class,” Lineweaver said. “Everyone in my group wants to go into consulting, and West Monroe is a very impressive company that we’re all looking at, so that’s definitely an incentive to participate. I know we all feel we’ve learned a lot this time.”

“It’s great for students to get this kind of exposure presenting in a professional setting,” senior lecturer Jan Taylor said. “I’ve been to a lot of competitions, and these kids think all schools prepare students the same way. When they’re finally with other schools, even some really big schools, they figure out, ‘Oh, we’re learning skills that others may not be.’” 📖



Blockland Hackathon

From the Dressage Ring to the Hallowed Halls of the Pentagon: FSB Alumna Keeps it Civil(ian)



DRESSAGE

Amateur Sarah Nather trained Furst Rubin from a three-year-old 4-year-old to a second level senior title at the Col. Brent Ljungqvist Memorial Championships.

Nather And Furst Rubin Rise To The Challenge At CBLM Championships

This amateur rider and the horse she trained herself put in a clutch performance when it counts.

BY MOLLIE BAILEY
PHOTOS BY PHOTOSPOU.COM

Sarah Nather didn't go to the Col. Brent Ljungqvist Memorial Championships thinking she'd be a shoe-in for any big awards.

A busy adult amateur, she wasn't sure how she and the horse she'd trained up from a 4-year-old would compare to the A-division. But she and Furst Rubin put in one of their best tests to date, winning on a mark of 66.67 percent at the 34th annual CBLM Championships, held in conjunction with the Virginia Dressage Association Fall Competition, Oct. 13-16, in Lexington.

"I'm super proud of him," said Nather, 26. "We gave it all we had and when I came out of the ring I was thinking, 'There's nothing I would change. That's the best test I could have asked him for.' My parents said I was grinning from ear to ear."

Nather and Furst Rubin paired up 3½ years ago when he had just mastered the basics of walk, trot and canter. The Oldenburg, originally named simply "Rubin," is by Rubin Royal just out of Countess Catherine. Nather added the "Furst"—German for prince—to reflect his parents' regal names, and it didn't

hurt that her own first name is Hebrew for princess.

Furst Rubin is Nather's modest budget, and compared with her last horse, whom she bought at 2½, the 4-year-old scored relatively experienced.

"My thinking was that with a full-time job I didn't have time for a real baby, so it was good to have one who had the basics," she said. "I knew I could do the rest."

Not that it's been easy. Nather's schedule is tight that she's moved out, as they never get her lights on. Most days she rises at 5:30 a.m. to commute from Upper Marlboro, Md., to Arlington, Va., so she can register in a quick workout before starting her job as a civilian IT specialist for the U.S. Army at the Pentagon. After work, she handles highway traffic for Farm in Bowie, Md., to train with Anna Nekras. Nather usually returns home around 9:30 p.m.

Come January she'll be adding even more to her schedule, as she's been accepted at the National Defense University (NDU), where she will be studying government information systems in their chief information officer program, but she wouldn't have it any other way.

"Dressage can be really intimidating as a working amateur," she said. "Sometimes I wish I could have that extra lesson, but I can't afford it. But it's so nice to have done the work myself. We have a great bond."

"My trainer says, 'The sun rises and sets on you for him,'" she continued. "He gives 100 percent every time. Every judge comments on my test and I love to hear it."

The CBLM Championships represented Nather and Furst Rubin's final show of the year. They've been schooling third level at home, and Nather hopes to graduate to that level when the season picks up again in the spring and achieve her final scores for her U.S. Dressage Federation bronze medal.



While you may find her spending most of her days on a military base in Maryland, you won't find her dressed in camouflage or wearing any military rank as a soldier. Sarah has discovered a way to serve her nation using her skills as an Information Technology (IT) professional. She's an IT Specialist who currently serves at the Defense Information Systems Agency (DISA) for the Joint Interoperability Test Command (JITC) where she brings innovation to the Department of Defense's IT network.

How did she end up there from the cornfields of Ohio? It all started her junior year at Miami University. Miami is known as a military and veteran-friendly campus, and the Army was on campus recruiting for their IT leadership development program for IT civilians among future Miami graduates. The recruiters noticed Sarah's resume and reached out to her. ***“Part of the Army’s reason for hiring from Miami is that they wanted a different mindset. They were looking for graduates who knew the latest and greatest technologies but could think outside of the ‘military mindset’ which enabled them to sit in some pretty high-level meetings and say, ‘are you sure that’s what you want to do?’ rather than just a ‘yes, Sir.’*** They wanted this different level of thinking to bring another perspective to the conversation,” Sarah remarked.

As a junior, Sarah wasn't initially eligible to interview for the position, but she was intrigued and connected with the recruiters a year later. They were still interested in her and an intense interview process began. Before she knew it, Sarah was packing her bags and her horse to leave the rolling hills of Miami's campus for the hustle and bustle of Washington, D.C. as she joined the Army's two-year career development program in June 2010.



Because of her information systems (IS) expertise, Sarah has had the opportunity to work on a broad range of mission-critical projects. “IS professionals are change agents. We're often involved in a lot of different things. So early on in my career, I did a lot of emerging technology program management for the Department of Defense (DoD). I worked for an Army agency in the Pentagon, which provided all the IT services to the building. Our job was to provide all of the computers, phones, anything that was IT and connected to the network, had something to do with us.

“During my time there I did two major IT projects for the DoD in the early part of my career which modernized the desktop using virtualization-based technologies and created a testing lab environment for the agency to create and test new solutions or devices on the Pentagon's network to see how they would function together. My last project at the Pentagon was leading a team to conduct a whole overhaul and modernization of the Pentagon's phone system. The size, scope and complexity of that project was very challenging, especially when it's a technology touching everyone in the building!

“In 2017, I accepted my current position with the Defense Information Systems Agency with the Joint Interoperability



Test Command who tests military IT systems integration across an array of military platforms such as ships, ground forces, and satellites to ensure our Forces can communicate and interoperate. My new agency's mission expanded far beyond the five-sided walls of the Pentagon as DISA's mission is to be the IT service provider for the U.S. military globally, this brings a whole host of new and exciting possibilities for IT applications," Sarah explained.

Sarah's journey might have turned out very differently. Even though she grew up in northern Ohio, she didn't know about the Farmer School or Miami University until she started her college search. Her passion was, and still remains in dressage, an equestrian sport sometimes compared to ballet on horsesback. Being practical, Sarah pondered, ***“What can I do, that I would like to do professionally but that can help me afford to pay for the thing that I love doing?”*** Her dad was a Management Information Systems (MIS) major and had been in IT his entire career, so she grew up in a household with an IT family member who immersed her into computers and the potential of applications of IT.



“Growing up with my dad as an IT mentor allowed me to see the diversity of IT and he encouraged me to see the field as an interesting possibility. As I developed my skills over my high school years, I found I enjoyed working with computers and technology to create things. So, I focused my search on seeking a business school with an information systems major.” She quickly learned something else in her journey to pick out her future college—many important people in her life were Miami grads. As Sarah noted, “It's something that you just don't ask when you're a kid, ‘Hey, where'd you go to school?’ It's funny how many were Miami undergrads. Even to this day, I run into them in the most unlikely of places!”

At orientation, Sarah's dad connected with information systems and analytics department chair Skip Benamati (pictured above). He was the first Miami faculty member she met and he remains a valued advisor to this day.

“Even in my freshman year I would stop by his office. I'd pop in and say, ‘Hey, I have some questions about this class or this, that, and the other thing.’ ***I built that relationship and it is something I am glad I invested the time into to this day.*** As I went along my path at



Miami, I built relationships with many of the professors in the IS department. In my junior year I actually went on to work in the IS department as an undergrad assistant for the IS lab teaching Microsoft SQL to the business students. ***The IS department faculty and students kind of became my own Miami family and to this day I still feel like that and I have always kept in contact.***

Sarah credits her education and her Miami experience for setting her on the path to success. ***“Miami taught me a willingness to learn. The Farmer School taught me the foundations in business that I needed to succeed.*** It did a good job by giving me an understanding of finance, marketing, and accounting to make me diverse and not just an IS major. All these systems that I implement touch these different business areas and having an understanding of what other people do and the other parts of business and how to translate that these into IT is invaluable.”

“Farmer did a good job of making sure that I was well rounded, but they also pushed the bounds of IS as well to make sure I was ready for the step beyond school. During my time in IS, Dr. Merhout taught an IT security class. While cyber-security was beginning to grow when I was in school, it hadn’t reached the spotlight in IT that it has today. But now it is THE thing to know. I credit Dr. Merhout and that class for igniting my interest in security and security controls and how you build security into a system. That’s one of the things that I have continued to take an interest in and I am often consulted at work regarding my understanding of the topic and its’ application to the DoD.

“I credit Skip Benamati’s approach to teaching us project management as one of the reasons I was successful in my first experience as an IT project manager after I graduated. ***I’ll never forget that day in class in my senior year when Skip came in and said, ‘I can teach you project management by teaching you the book. But that’s not going to do you any good.’ Instead, he went out and found us a job working for part of the university*** and developing an information system and had us work on delivering the solution as a class project instead of just lecturing us on project management and its pitfalls. Having a project under my belt going into my first major effort in the DoD helped me have a little bit more confidence in myself and avoid some of the pitfalls. Those experiences at Miami have taught me to branch out and try new things, even in my professional career.”

Her confidence and willingness to take on challenges have led to some of her greatest successes. ***“Some of the biggest moments in my career and some of my biggest***

successes have been those moments where I have taken the jump. Someone has pushed me and said, ‘I think you can do this, even if you aren’t sure you can, or you fear failing.’ I found myself believing in myself and saying, ‘You know what, I’m going to take a leap of faith and do something which scares me, takes me out of my comfort zone and it will make me grow’ and that applies to anything in life. It’s always pushing yourself to be better, to try something new. That’s something I think I have really adopted over the years both personally and professionally and it has served me well.”

Even though Sarah doesn’t seek the spotlight, her accomplishments were recognized by Miami’s Alumni Association, and in 2015, as she was celebrated as an “18 of the last 9” honoree. The annual award recognizes 18 outstanding alumni who have graduated in the last nine years. Being honored with the award surprised Sarah as IT is often a very misunderstood or underappreciated field because it isn’t always relatable or easy to understand.

“It was really rewarding to be recognized. That was my first time back to campus since graduation more than five years before. It was interesting to come back and see Miami from a different light and hear stories about what people thought of me as a student and my time there. I didn’t realize how much they appreciated me there and how much I really contributed to the Miami community. The most rewarding part of the trip was talking to the students, especially taking part in the first women’s STEM panel. It was really rewarding to sit on a panel filled with women from various parts of the IT field. You have to keep in mind this is a field where there aren’t a lot of women, and by sharing our stories with the students we hope to continue to grow the presence of women in STEM. My graduating class of IS majors in 2010 had only seven women graduating, we were one of the largest groups of IS women majors to have graduated from the IS department and I am sure this is only a growing trend.”



“That award inspired me to continue reaching out with Miami alumni events here at DC and back in Oxford. I try to keep in contact with Skip and some of my professors to let them know what’s going on here in the DoD and how that relates to what they’ve taught me and what the future students might be interested in doing.

“Giving back to Miami by sharing my experiences and providing mentorship to current students is something I really enjoy. *The more time I spend investing in the students and the university, in terms of helping them, I feel like we both win.* I think it’s a great way to give back to the university who gave me so much. I hope sharing my experiences might help someone else take a similar track or look at things differently, but most of all find their own unlikely but rewarding journey.” 🌸



From an ESPN Article to a Funded and Productive Research Stream

Dr. Fadel Megahed, *Assistant Professor of Information Systems & Analytics*

Over the past three years, I have been asked a version of this question repeatedly in every academic conference that I attend: “How did your research evolve to focus on workplace safety despite your intensive training in manufacturing quality control?” I believe a standard notion in being awarded a PhD is that a candidate should have carried out extensive and novel research in a field of their choice. In my case, I was becoming a leading expert on the use of image and 3D scan data for manufacturing quality control, which is/was a very timely research stream due to the U.S.’s transition to advanced manufacturing. In my PhD journey, I have learned that I am passionate about applied research, as opposed to basic research, i.e., I enjoy solving business problems using real and messy data (instead of theory development which is often based on assumptions about how the world should be modeled). So the question remains “what happened?”

I have long been an avid college football fan (supporting both Virginia Tech and Auburn), and I was working as an assistant professor of industrial and systems engineering at Auburn University from 2012–2016. During the 2014

BCS National Championship game, Auburn lost in a heart breaker 34–31 after leading for three quarters. We were outscored 21–10 in the fourth (and we lost on a touchdown pass by FSU with less than 15 seconds on the clock). OUCH!!! About six months later, ESPN wrote an article titled “FSU rides GPS technology to title.” The article talked about how FSU used analytics and wearable sensors to manage fatigue and ensure that their players could achieve their peak performance in football games. I suspect that the analytical approach used by FSU allowed them to have the edge in the fourth quarter.

As the saying goes, “there is victory even in defeat.” From this ESPN article, I saw an opportunity—could we use wearable technology to manage fatigue at manufacturing workplaces? A much more complex task than what FSU accomplished because employees work longer hours, with less intensity; there are larger variations in worker capacity (e.g., workplaces can have workers whose age, sex and/or body type can lead to different strength and endurance capacities); and workers can have multiple jobs. From my



academic perspective, this was a fascinating research stream that tackled an important problem that has serious health and economic effects. Fatigue is estimated to cost U.S. employers \$136 billion annually.

After reading the ESPN article, I immediately contacted a colleague, Lora Cavuoto, who I knew would be interested in this topic, too. Lora is an associate professor of Industrial and Systems Engineering at the University at Buffalo. ***We talked about how we could combine her expertise in occupational safety and health with my analytical skills to examine the use of wearables for fatigue management in manufacturing workplaces.*** After a few months of preliminary research, we were able to submit a grant proposal to the *American Society of Safety Professionals Foundation* titled “ASSIST: Advancing Safety Surveillance using Individualized Sensor Technology”. The premise of the proposal was to determine how to quantify fatigue in individuals and help safety professionals enact policies that would reduce fatigue-related accidents. The proposal was funded in the summer of 2015 for \$300K.

To study occupational fatigue, our team included researchers from five universities: Miami University, University at Buffalo, Auburn University, University of Dayton, and Saint Louis University. From an educational perspective, the project supported four PhD students (three of whom

have accepted faculty positions of Business Analytics and the fourth who will pursue his post-Doctorate) and one undergraduate researcher (who is now pursuing his masters at MIT).

Some of our major learnings include:

- An estimated 58% of U.S. advanced manufacturing workers reported being fatigued in the previous week. The large percentage of fatigued workers implies that the technological advancements in the workplace have increased the workload on the highly-skilled workers being employed. Thus, there is room for ergonomic improvements in designing these jobs.
- Wearable sensors can detect fatigue in different manufacturing tasks.
- When fatigued, workers attempt to mitigate the effects of fatigue differently. For example, in pace-controlled manual material handling tasks, some participants elected to have shortened and faster steps, and others had longer but slower strides. From a workplace perspective, this is an interesting finding (not reported in the previous literature) and cannot be detected by traditional end-of-the-line measurements. Detecting such changes is a precursor to a deteriorated performance, where the work quality can suffer.
- There is a limited body of literature on effective interventions to combat physical fatigue at the workplace. We have found that there is only strong evidence supporting posture variation, vitamin supplements and rest break. The evidence supporting other interventions is limited.

Rather than keep our research proprietary we wanted to promote future research and adoption by industry, so we created an online repository of our code and papers. ***For our future work in this area, we are currently pursuing partnering with manufacturing firms to deploy our research methods; investigating fatigue at the muscle level, instead***



About Dr. Megahed

Dr. Megahed joined the Farmer School faculty in 2016 as an assistant professor of information systems & analytics. He received his Ph.D. and M.S. in industrial and systems engineering from Virginia Tech, and a B.S. in mechanical engineering from the American University in Cairo. His current research focuses on creating new tools to store, organize, analyze, model and visualize the large heterogeneous data sets associated with modern manufacturing, healthcare and service environments. His work in these areas have been recently been funded by Aflac, The American Society for Safety Professionals Foundation, The Procter and Gamble Fund of the Greater Cincinnati Foundation, Amazon Web Services, Microsoft, The NIOSH Deep South Center for Occupational Safety and Ergonomics, and The National Science Foundation.

Dr. Megahed has 30 published journal papers and eight conference proceedings. His most recent research, which he discusses here, was funded by The American Society of Safety Professionals Foundation. The final project report, which was submitted to the foundation in December and made available to the public in early January, has been covered, repeated or cited by more than 50* media outlets.

**As of 01/18/2019*

on the whole body level; and investigating the use of multiple data sources (such as on-board truck data with online information capturing weather and traffic flow) to improve transportation safety. 🇺🇸



While many universities are labelled as either “research” or “teaching” institutions, both the Farmer School and the university as a whole are known for exceptional faculty who use their research to enhance the education they provide to their students. Dr. Megahed is a great example of this. As he explained, “My research, teaching and service are all driven by how we can use data to make better decisions. Since my research is translational, it has been adopted by several companies. My interaction with industry allows me to construct case studies and interesting experiential learning opportunities for our students. My research also spans some other fun topics like social media analytics and stock market prediction/optimization since they can be used to improve the experiential learning of our students.”



BEYOND BITCOIN

• Club Explores & Educates • ON BLOCKCHAIN TECHNOLOGY'S POTENTIAL

If bitcoin and cryptocurrencies are the first thing you think of when someone says “blockchain,” Patrick Young says you might want to look a little deeper.

“It’s the next wave of the Internet,” Young explained. “People are getting too focused on bitcoin and missing the point of the underlying technology and the advantages that blockchain is poised to provide us in the future.”

The senior marketing major said he started the Miami University Blockchain Club (MUBC) in August 2017 to “provide an educational outlet for students who are interested in this topic.” ***Young believes that blockchain could revolutionize a wide array of business and social practices, such as supply chain management.*** “What we have in our current systems is essentially information silos, different

ledgers between every business process. There might be a shared ledger between an original manufacturer and shipping, then the retailer. But having a different ledger between each process of the business, there’s a lot of implied issues with that system,” he remarked. “Whereas with a distributed ledger, you essentially combine the existing ledgers into a single shared database available to all participating parties.”

The club’s leaders believe that blockchain’s inherent transparency gives it a significant advantage over legacy documentation systems. “With the distributed technology, you can find where any of the information came from, like a timeline,” junior architecture major/entrepreneurship minor Jake Salerno explained. “You can track many different goods into one entity. There are so many different attributes that have to be accounted for on their own behalf, and then reported to whoever is in charge as to where they are.”



And much like blockchain itself, the club has grown rapidly. “It’s been a pretty wild ride. Got started with about 20 members, but last time I checked, we had 194.” Young noted.

“The growth of our club has been driven by our enthusiastic members. Miami attracts many bright, driven students that truly make our members our greatest asset. On the other hand, blockchain technology has continued to make great strides, drawing attention on a global scale,” junior finance major William Becker said. “When you couple an exciting new technology with an incredible member base, it is no surprise that MUBC has taken off in the way that it has.”

“We wanted to share the knowledge that we have already,” Salerno remarked. “We wanted to give students the right place to collaborate with each other, bring all these different minds together into one conversation.”

“As we started to grow, it became a lot more difficult to have, essentially, a curriculum where we would build on the previous meetings,” Young said. ***“In the future, we hope to offer consultation***



services, to be able to develop proof-of-concepts and advise businesses on where and how blockchain could be beneficial to their business.”

In conjunction with information systems & analytics assistant professor Dr. Arthur Carvalho, the club has worked to get a blockchain course added to the Farmer School curriculum. “We grew to such a size because we had people excited about the technology, and now we can channel them into the university and take a more structured approach to learning about blockchain.” Young pointed out.

“It’s such a new technology that has the potential to impact industry, applicable to the back door and the front door of the way that we engage,” Salerno said. ***“With our generation being the newest to go into the workforce, what better time to learn than in college?”*** 🇺🇸

Blockchain Barbie

SHATTERS PERCEPTIONS



Think fast. What’s the first image that pops into your mind when you hear “Blockchain brainiac?” or “Tech wiz?” Chances are, your image isn’t one of a petite, blonde, female Farmer School senior who has a penchant for wearing pink and whose role model is Barbie. Meet Dana Schwartz, aka The Blockchain Barbie.

Dana grew up in Chicago. Her mom was in one of Illinois University’s first graduating computer science classes. She was one of only two women in that class. Her first job? Coding. It was very intense coding for United Airlines. She told Dana that she should consider a career in computers as well. Dana was unconvinced...*at first*. Dana remembers, “My mom always told me, ‘Oh, you’d be so good at computers, you’re so logical, analytical.’ You don’t want to do what your parents tell you when you’re a kid.

“When I was 13, I started a blog called *Happenin’ Hotels*. I was fortunate, I got to travel a lot growing up, and the one thing I noticed was that the hotels really did nothing for the teenagers. Hotels focused on the parents and the adults, because they were the ones paying for stuff, and then they would have things for little kids, like Kids Care. But it’s 13, 14, 15, 16 year olds who don’t want to be with their parents 24/7, but aren’t old enough to be going out to a bar or club or something, so what do they do? So I started reviewing hotels from a teenager’s perspective. Do you have free WiFi? Do you leave cookies in the room? Do you have some sort of in-between teen thing? Do you have mocktails? And the blog took off in the industry, and I started getting calls from the head of the Four Seasons in Mexico, and all these different places asking me, ‘What can we do to make our teen program better?’

“I had my first internship at the Intercontinental Hotel on Michigan Avenue in downtown Chicago when I was 16. I was interning in the guest relations department as a teenage concierge. One of my tasks was to create and write the weekly newsletter—the piece of paper you get when you check into a hotel with the sporting events, musicals, and other happenings in the city. This was the first time I really played around with Microsoft Word. I must have been good at it, because I was asked to stay on and continue writing the newsletters remotely after the summer ended.



From there, I decided to capitalize and I eventually got multiple 5 star hotels to outsource their newsletters to me. I began writing weekly for places like The Fairmont and The Four Seasons—all because ***I loved how I could mix words and formats on a computer.*** I still own the company today. That was my first introduction to the computer world.”

From there, Dana continued her deep dive into technology, interning for Avionos, a technology consulting company in Chicago that designs and implements digital commerce and marketing solutions. One of the employees there connected Dana to Remodista.



“I got involved with the social think tank, Remodista. Remodista’s goal is to combine fashion fintech and fourth industrial revolution technologies to create a community that solved issues in (mostly) the fashion industry—empowered by women. Being the youngest in the think tank, I was often given some of the grunt work. This was really right around the time that people began talking about blockchain and bitcoin. My biggest project? Reading hundreds and hundreds of pages of research in order to give the rest of the think tank the “spark notes” version of blockchain and bitcoin. I had officially been bit by the blockchain bug. I started writing on the topic and eventually started to get my research published on different platforms.”

As invested and connected in Chicago as Dana was, she had her sights set on a different geography for her college experience. “I wanted to go to school in the South or the Carolinas. I told my folks, I’m going there, you can’t stop me. That was my plan. I did a whole road trip, I went to a ton of schools there and at the last minute my mom said that I should check out Miami. ***All I knew about Miami was that it was surrounded by corn fields and I grew up in the city of Chicago. So I was not familiar with corn fields, and I thought, is she***



crazy? There’s no way I’m going to go to a school like that. But I came, I visited, and I absolutely fell in love.

“I knew I wanted a business school, and Farmer was obviously incredible. I could be directly admitted which was great for me. And socially it had a lot of things I wanted. I knew I wanted Greek life. I knew I wanted a college feel kind of a town. So it really just had everything I was looking for and when I came I completely fell in love with it.

“After coming to Miami, it seemed like a no brainer declaring my information systems major. Since then, I’ve become the president of the Information Systems and Analytics Organization and continued to fall in love with each and every one of my classes—especially the technical ones.

“It became apparent in the tech space that I had a knack for representing a young, atypical woman in tech who did not fit the stereotypes. My whole life, people have always compared me to a Barbie doll, for better or for worse. Blonde hair and always wearing pink, it made sense. Of course, for many, it was just their way of calling me a dumb blonde and it was meant as an insult. To me, it was an absolute compliment, so I created TheBlockchainBarbie.com.



“Barbie has had every career in the book. She has done it all, and to me, she represents everything a woman could be, regardless of the stereotypes. Over the years, she has taken on more than 150 careers and has been breaking glass ceilings since she first went to the moon in the 1960s.

She has helped young girls imagine their lives as doctors, teachers, pro athletes and even President of the United States. In 2010, she pioneered her way into the tech industry as Computer Engineer Barbie.



“It was clear that blockchain wasn’t an easy topic to grasp. Sure, there are blockchain dummy guides online, but even I would need a dictionary to read those... and I’ve spent years researching and learning. It was obvious to me that there was a major gap in really getting people interested in learning what (in my opinion) will be a life changing and disruptive technology—for all of us. So, in May 2018, I published my “Blockchain Guide for (not so) Dumb Blondes.” The goal was to keep the language simple and the content relatable. After that, The Blockchain Barbie brand really took off.”

Dana decided to focus her writing and research on unique ways blockchain would change our futures. Her activities and expertise have landed her the title of “STEMfluncer.” She is frequently interviewed about being a woman in tech and how to break the stereotypes and inspire younger girls. ***She has worked with professionals in the technology/ blockchain space around the world—helping educate and research.*** She traveled to Australia where she met with multiple blockchain companies, including Power Ledger and Horizon State. She consults for an analytics company headquartered in Spain and Denmark. She has





also worked with the wine industry in Napa Valley. She was recently tapped for membership in Women on The Block—an elite group of women in blockchain around the world—opening up invitations to conferences in Asia and Manhattan. She continues to guest blog for several companies and does consulting work on how/why blockchain could be valuable to companies and organizations. She is also completing a blockchain certificate program at MIT’s Sloan School of Management ... all while being a full-time Farmer School student.

On campus, she helped start the Miami University Blockchain Club and served on the first executive board as the Head of Blockchain Research. Dana is also working on a research project with Professor Jeff Merhout on the “less than obvious” ways blockchain will shape the future of business. The results will be submitted to conferences this spring. Of course she was one of the first in line to register for the first blockchain course Miami is offering.



It’s no surprise that Dana already has the first step in her after-graduation journey in place. “I accepted a job with EY in their Forensic & Integrity service practice, doing fraud investigation and forensic technology in Chicago. I interned for them this past summer and I really loved it. They have amazing people and I think it’s a great place to begin the next stage of my career. The work itself is fascinating and they’re starting to bring a lot of blockchain into their practice.”



Will Dana leave her pink cape and superhero ways behind? Not a chance. ***“Being a girl in technology is like a super power. Even if I walk into a room and I’m the only girl there, and every person in the room thinks I might be a dumb blonde, that’s great. I hope they think that, because as soon as I talk, they’re going to be paying attention to me, even if it’s to listen for me to say something dumb. Then they’re going to see that I’m not, and to me that’s something really powerful. If I was just like everyone else in the room, I wouldn’t really stand out.”*** 💡



ALL EYES ON ME IN THE CENTER OF THE RING

Why I Want Attention for Being a Girl

Let's face it—the workforce, especially in the tech industry, is still dominated by men. With some of the most recent workplace conversations making major headlines, it is no surprise that there is some slight hesitation and angst for younger women about to take those first steps into the workforce. As an upperclassmen college student, I can confidently say that from time to time, those thoughts have crossed my mind.

Yes, some of the stereotypes are true. My classes are mostly guys, my professors are mostly men, and people still have a pretty stunned look on their face when I tell them I am an information systems major with a focus in computer science and blockchain technology. But if you ask me, it's only made me **THAT** much more powerful. There might be a stereotype of what a woman in technology looks like, but I do not fit it... and that's part of my super power.

People have said time and time again that being a woman can put us at a serious disadvantage in a space like this. I have found it to be quite the opposite. It's a really exciting time to be a woman in the workforce, especially in the technology industry.

Not only are we seeing more and more women taking leadership positions, we are also seeing women coming together to build one another up. Even the men are getting in on it! At my university, I feel nothing but motivated and inspired by my male professors. Walking out of interviews, I have a sense of pride knowing I was nothing like what they expected me to be. I walk into a male dominated room and know their eyes are on me. Am I intimidated? Absolutely not. With all that scrutiny, I'm left with the chance to surprise them. I know what I'm saying will be heard, and I am confident enough in my own abilities to know what I'm saying holds value and deserves to be recognized.

As a young woman going through the internship, interview, and full-time hire process, I am excited to check the box that identifies me as a female. Now more than ever, companies are looking to diversify. In that sense, being a woman is to my advantage, so why not use it? I am being sought out because I **AM** a woman!

Naturally, we must consider that not every story or experience is the same, but from my personal experience in the space, knowing my worth and being truly confident in my abilities is what is setting me up for a bright future.

Do not run from the idea of being the only woman in the room. Take it, run with it, and be confident in the fact that you are the **ONLY** woman in the room! **OWN IT!** Prove them wrong—Elle Woods style if you will. Sure, there might be some stigma and criticism that goes along with it, but nothing good is ever easy. If I'm being criticized, at least I'm being recognized. 🍷

Dana Schwartz



Back to the Future: Career Advice to My Younger Self

Jim Fowler, MU '94, Executive Vice President and Chief Information Officer, Nationwide

In any business, planning for long-term personal success is tough. But in technology, it's especially difficult. When choosing which skills to develop and which personal qualities to strengthen, you have to anticipate not only what the top jobs in your industry currently demand, but what they will demand in the future. You not only have to imagine your future self, but also the ecosystem that you'll have to navigate and lead your teams through.

To all the students at Miami who are embarking on their educational journey or into their career outside of Miami, here are four things I wish I could travel back in time to tell myself.

1. Every effective leader is now a disruptor.

In the past, management experts divided the careers of effective leaders into several types. There were founders, who created whole organizations out of

nothing. There were custodians, who took it as their mission to shepherd an organization relatively unchanged through a certain period of time. There were technocrats, bent on rooting out every possible inefficiency. There were reformers, diplomats, etc. The list goes on.

What I've learned is that because of the exponential pace of change today, there is now only one type of effective leader: the disruptor, the one responsible for ushering in change.

He or she may employ the strategies of other leadership styles, *but the one overarching goal of anyone in a leadership role is to identify what types of change will help an organization to thrive*, and then drive that change at every level.

2. Take the jobs nobody else wants.

There's usually a good reason that a particular job or long-term project gets left on the table. It might seem tedious or thankless. Most often, it's a difficult job that doesn't fall into a clear category. In our age of rapid change, difficult usually means confronting a new type of problem that no one has found a solution for yet.

Very early in my career, I took on one of these jobs. It entailed rooting out errors in highly technical processes across a wide swath of the businesses I was working in. Ask anyone: I had to sell a solution that seemed annoying, time consuming, and worst of all, required change.

But it ended up being one of the most important jobs in my early career. It forced me to talk to people in parts of my organization I might never have otherwise met. It taught me how to launch a new initiative from scratch. And most importantly, it taught me how to understand and manage influence (see below for more on that). ***So the next time your boss is wandering the halls trying to find somebody to take on that job that nobody else wants, take a closer look.***

It might just be the boost that your career needs.

3. The most important skill you're going to build is influence.

Nationwide has the benefit of employing brilliant business leaders, actuaries, and underwriters. GE employed the world's best engineers. They are truly some of the smartest people I have ever met. This is great for our customers because it means they are getting the best products the world has to offer. But to a manager, brilliant colleagues can sometimes be the most challenging.

There have been times when I've been pushing a new process or a new tool, and I've put my full force behind it—yet failed in getting my business partners to join me on the journey. I ended up convinced by their list of reasons for why the new process was impossible or a bad idea.

Over time, I've learned that it's not the process that's flawed, but my attempt to impose it from on high. If you want people to oppose something, tell them they have to do it. Think back to the two-year old version of yourself when "no" was your favorite word.

That's where the art of influence comes in. You've got to combine that particular blend of respect, camaraderie, help and persuasion to get something done. It doesn't matter what your title is, ***if you want real change, you've got to tap into your counterpart's beliefs and passions that genuinely resonate with your idea.*** You've got to be fearless about giving them the full picture and let them make up their own minds. There's no secret formula for influence. And recognizing that it's a skill you need to build doesn't make it any less sincere. You just have to take each person as they are, be transparent and respectful—and above all, patient.

4. Get lots of varied experience.

Early in my career, I took some deep dives into various areas of expertise. And it felt great. There's no better feeling than watching your competence level rise with each successive challenge. Being able to make increasing promises to your peers that you know you can deliver on feels great too.

While expertise can make you feel both secure and valued, it can also keep you stuck in

one place, and make you resistant to change.

A pattern I've observed in the careers of leaders I respect and have tried to imitate is this: while their early careers may have been propelled by specific expertise, they all left their comfort zones and took on the challenge of operating from a higher-level perspective.

These leaders became what you might call a "solutions architect"—a term I'm borrowing from software development, but it's a great description of what a manager does. A solutions architect has enough detailed knowledge of the different teams and processes in their organization to know where they can best be deployed, but not so much that they get blinkered by the details. They see just enough of the big picture to be in a position to make informed decisions.

This past year, I had to make the very hard decision to leave GE to become the CIO of Nationwide. It was the toughest career decision of my life. I left friends, colleagues, and industries that I loved. I was ready for a new experience. My move to Nationwide is taking me out of my "comfort zone." It's forcing me to learn a new industry, forge new relationships, and challenging me to deliver in a functional area that is foreign to me. It's scary and exhilarating all at the same time and I know that it will make me a better leader. If staying active helps you live a long life, continuously challenging yourself to learn and change helps you live a long career.

As the pace of technological change continues to accelerate, the ability to drive change, take on tough new jobs, understand influence, and see the big picture will only get more valuable. 🍷

Jim serves as a National Board Member for Year Up, whose mission is to "close the opportunity divide by providing urban young adults with the skills, experience, and support that will empower them to reach their potential through professional careers and higher education." He is also on the Board of Directors for the Columbus Collaboratory. He is an active member of the Farmer School's Information Systems & Analytics' Advisory Board and frequently meets with students and faculty in Oxford.

Visit Jim's LinkedIn page for more of his thoughts on technology and the best ways to harness it for growth.



About Jim Fowler

Jim Fowler graduated from Miami in 1994 with a dual major of management information systems and marketing. He is a Miami Merger his wife, Adrienne (Wood) Fowler, graduated a year later with a degree from Miami's College of Education, Health & Society. They are the proud parents of Catherine (Cat), a current Miami first year student majoring in speech pathology & audiology. Jim later completed an MBA at Xavier University.

He started his career as a system analyst for NCR before moving to a management position with Accenture. In 2000, he transitioned to the first of many positions with GE, starting as the manager of Unix technology, and quickly moved up the ranks to the "C Suite." After working as an IT leader in almost every GE business, Jim became the Chief Information Officer and Group CIO for GE. In late 2018, Jim left GE to assume the position of Executive Vice President and Chief Information Officer at Nationwide.



Dr. Sooun Lee



Dr. Arthur Carvalho



Dr. Maria Weese

COMBINATION OF FACULTY & PROGRAMS MAKES THE FARMER SCHOOL A WINNER

In its most recent rankings, the *2018 Top Undergraduate Business Schools*, Poets & Quants magazine placed the Farmer School as the number 17 public business school in the country and the top business school in Ohio.

The rankings were based on three equally-weighted criteria—admissions standards, student experience (based on an alumni survey) and career outcomes (percent of students with internships before graduation, percent of students with full-time jobs within three months of graduation and average salary and signing bonus).

Farmer School alumni ranked the school as one of the top 10 public schools, giving the highest marks for quality of teaching, faculty availability and preparing graduates for their careers. When asked if they would recommend the business program to a close friend or colleague, alumni responded with a resounding “Yes,” grading Miami with an A+.

Value Colleges listed the Farmer School among the 50 undergrad programs that provide the highest overall return on investment based on publisher and student reviews, annual total costs and early career salary data.

In ranking the Farmer School in its top 40, Value Colleges said, “Miami University’s undergraduate business programs are some of the finest in the Midwest—not South Florida, but Oxford, OH. Students choose majors from the eight departments of the Farmer School of Business, one of the top business schools in US higher education, as well as numerous minors, and special themes, as well as workshops and extracurricular groups. From economics and entrepreneurship to supply chain and operations management, Miami’s Farmer School is on the forefront of business education.”

Within the university, our faculty are also receiving high marks. Dr. Sooun Lee, professor of information systems and analytics, received the university’s 2018 John E. Dolibois Faculty Award for Innovation in Global Programming after a nomination process and award committee recommendation. The Dolibois Faculty Award in Global Programming recognizes a faculty member at Miami University whose leadership of global academic programming demonstrates innovation in international education, and who commits to increasing intercultural competence among students while contributing to the strategic objectives of internationalization at the university.

At the Farmer School level, two information systems & analytics professors were selected as named chairs. Dr. Arthur Carvalho, assistant professor of information systems & analytics, was named as the first Dinesh & Ila Paliwal Innovation Chair and Dr. Maria Weese, assistant professor of information systems & analytics, has been named as a Richard T. Farmer Endowed Assistant Professor.

Dr. Carvalho received his Ph.D in computer science from the University of Waterloo and taught at Erasmus University prior to joining the information systems and analytics department at the Farmer School in 2016. He has already authored or co-authored six scholarly publications in his Farmer School career and has developed a new blockchain course which will be available to Miami University students during the spring 2019 semester.

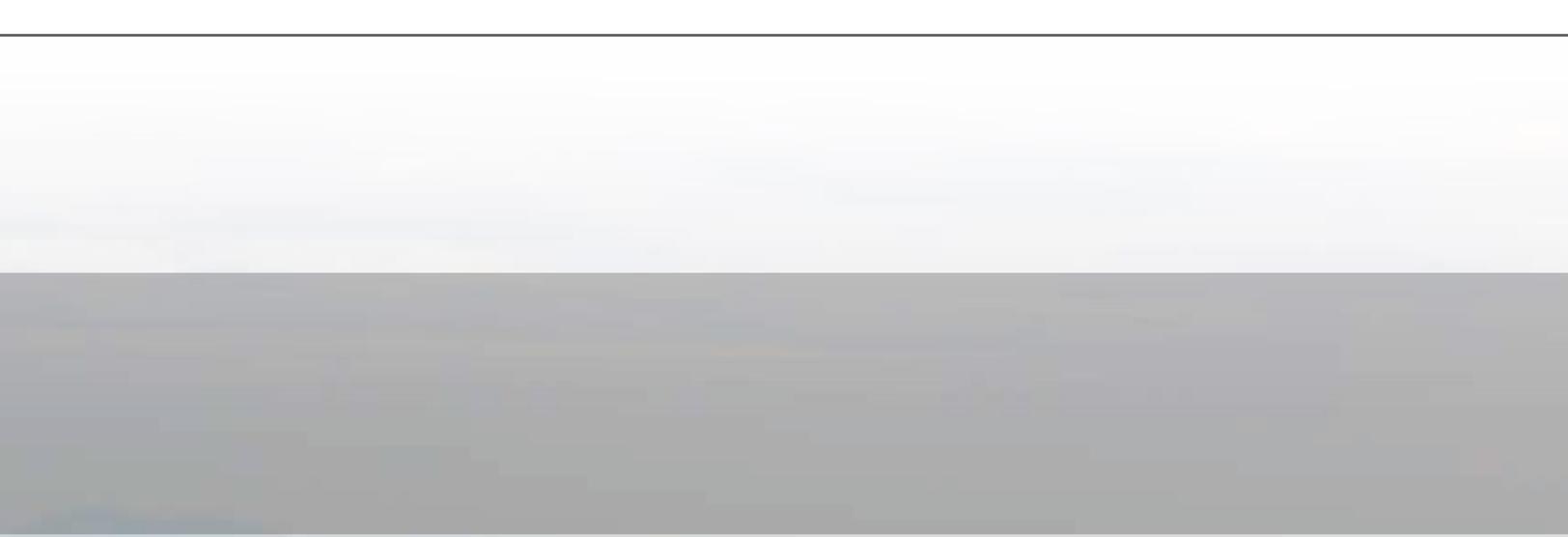
Dr. Weese received her Ph.D in statistics from the University of Tennessee before joining the Farmer School in 2010. Her numerous teaching awards include nominations from both students and other faculty members. Her excellence in the classroom is matched by her research productivity with several recent scholarly publications. 

WINTER

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FROM THE





ORDINARY





Women in Entrepreneurship

While many college students spent their winter breaks honing their videogaming skills, more than 250 Farmer School students got a jump start on the 2019 school year by taking part in one of five study away programs or spending winter term at one of four study abroad sites.

With stops in Colorado, Oregon and North Carolina, students on the *Supply Chain Craft Brewery Field Study* spent much of January learning the ins and outs of the brewing industry. During the program, students visited more than two dozen craft breweries, several larger breweries, as well as can and bottle manufacturing plants. They even visited a cheese factory, where they learned that the process for making cheese is very similar to the beer-making process.

“I felt that the brewing industry was a perfect way to understand supply chain and strategic managerial decisions,” senior accounting major Nick DiFilippo explained. “From securing the sourcing of hard-to-get raw materials to

making a small brewery stand out among industry leaders, it was amazing to talk with all of the individuals who were able to do so.”

“I cannot say enough about my experience overall. It more than lived up to its hype as one of the best programs Miami has to offer,” senior supply chain and operations management major Cory Huddleston said. “If I had to pick a favorite aspect of the program, it would have to be having the opportunity to meet and talk with the founders of various breweries face-to-face and ask them about why they do what they do. The brewing industry is filled with creative individuals, each with their own opinion on what makes the best strategy for a brewery. Getting to hear these diverse opinions within the industry made for a highly rewarding trip.”



Entrepreneurial Consulting



Asian Financial Markets

“Being able to talk to so many craft brewers made me realize how many of them started from just a regular person with a hobby,” DiFilippo said. “It was inspiring to be able to see how all of these brewers were able to turn this hobby into huge, successful operations.”

20 students took part in the inaugural program of the *Advancing Women in Entrepreneurship* initiative, as they visited nearly two dozen female founders and their companies in Cincinnati and San Francisco. The students learned about the paths the women took to be successful, how they learned from failures, and discovered the methods and means for designing their own career path.

“They would sit in front of these women, hear their stories, and then ask them questions. So it’s an entirely different type of learning process,” instructor Beth Troy pointed out. **“They had to seek those conversations themselves and then proactively engage with the**

founders or leaders afterwards to do follow-up questions, ask clarifying questions and seek their own meaning. They then used those conversations as prototypes and took them back to their own lives, to inform those plans and designs that they’d made.”

“When I hear consistent stories of women failing over and over again and still getting what they want, it really normalized the idea of failure for me,” senior marketing major Elizabeth Kilbride explained. “I have a list of 17 different things about perfection, being a failure, which I now can take with me, not only here but further into the rest of my life, and to think back on those stories as I get older.”

“I’d say the biggest thing I’ve learned is it’s OK to not be linear in your career path,” junior interactive media studies and Spanish major Maddie Zimpfer said. “I’ll probably be all over the place, just trying things out, prototyping, experiencing what I love and I don’t love.”

Across the Pacific Ocean, 25 students visited Singapore, Beijing, Hong Kong and Shanghai in the *Asian Financial Markets* program, which covered international business and international finance through visits to various multinational companies and offices. “We learned a lot about the Chinese economy and how the government plays a major role in it. We also got to interact with many professionals over extended periods of time, so I honed my professional skills on the trip in a big way,” senior finance major Cameron Warland said.

He said the program also helped him broaden his cultural horizons. “We had so many cultural experiences in which we saw and did things that do not exist anywhere else, things like seeing the Great Wall of China, Tiananmen Square, multiple Buddhist temples, and two stock exchanges. Every day was just so different than a day in America and it made me aware of myself and surroundings a lot more.”



“I definitely felt overwhelmed by the idea of everything I was going to experience, as well as balancing coursework and forming friendships with other students, especially as I did not know anyone at the start of our trip,” senior finance and music major Megan Garrett recalled. “We had a lot of support from our professors; in each new place they would introduce us to the food, transportation and culture. We had a lot of freedom to explore, so we all had the chance to make the trip our own, which was really meaningful.”

Senior finance and entrepreneurship major Emily Shirley said she signed up for the *Asian Financial Markets* program because it would be overwhelming. “I knew it would be the most uncomfortable study abroad experience I could have. ***I wouldn’t have been able to push myself as much, culturally, if I went to London or Australia. I wanted the experience to change my life and be difficult, which is exactly what I got.***”

“We stayed engaged by having company visits throughout, class every few days, and a free day or two in each place we visited. I feel that this added to the value I received from the program,” she said.

“The most valuable thing I took away was learning how to live in the moment. Being in a completely opposite time

zone, not being able to speak the language or read signs forced me to focus on what I was doing every moment,” Shirley noted. “I was rarely worried about what was coming the next day, much less later in each week. At school, I have been overinvolved and thought I was present-minded. After going abroad, I realized that I am anything but, and am taking actions to rebalance my life.”

The winter term *Entrepreneurial Consulting* class studied in both Oxford and in San Francisco. The students tackled a client project using creative problem-solving, design thinking and other applied creativity tools to create innovative solutions.

“I knew that this class would challenge my ability to lead within a team as well as research and develop solutions to the client’s problem,” senior finance and entrepreneurship major Maryanne Smith said. “It was a challenge that I have been looking forward to since hearing about the class freshman year.”

This year, the client was Madison’s, a small-batch gelato and sorbet maker founded by Matt Madison. “My partner and I were impressed by the talent, creativity and professionalism demonstrated by the class. The presentations were on point and offered real solutions to a host of growth issues the business is experiencing,” he explained. “The experience was a great one for our company and will most certainly help us in the future.”



Entrepreneurial Consulting

“I learned a lot about the creative problem-solving process, how to interview people, how to lead with my teammates, and many personal lessons from the challenges we faced,” Smith noted. ***“I took a lot away from this class that I am excited to practice this semester.”***

Students taking part in the *Cincinnati Immersion Week* spent their days and nights visiting more than a half-dozen Cincinnati-centered companies, talking with Farmer School alumni working in Cincinnati, and taking on a project to present to their corporate client at the end of the week. Each year’s experience is based on a theme—this year’s was agile project management practices and processes.

Clinical lecturer Debbie Coleman said the experience has three goals for the students:

- Visit and learn about top companies and businesses, their working environments and the job roles within the business.
- Build networks with each other, Miami alumni and other professionals.
- Become more familiar with Cincinnati, its culture, and its business ecosystem.

Coleman noted that the businesses that participate see it as a potential recruitment tool. “They get to see these students early, and for keeping the Cincinnati ecosystem strong, even if they might not get that student as a recruit into their company, it still brings Farmer School alumni into the area,” she said.

“It’s truly an immersion into Cincinnati, immersion in the topic of the year’s theme, and immersion into career-building and networking, figuring out ‘How are my academics aligning with where I want to head?’,” she explained.

“We were tasked with consulting for Kroger to address the challenge of navigating the changing retail landscape over the next ten years. We had three nights to put together a presentation, and on Friday, we got to present our ideas for the future in front of Kroger executives!” senior economics major Eliza Mills said in a LinkedIn post. ***“We all learned so much in such a short amount of time—and had a blast doing it!”*** 🇺🇸

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