

# Information Systems & Analytics

Summer 2024 Newsletter Volume 13

## 2023/24 - Anticipating Change Under Status Quo



Hi Everyone,

I hope the past year has been good for you all. It's hard to believe that this is the thirteenth year of writing this annual ISA update. I guess time flies when you are having fun.



Leading the outstanding team of ISA academic professionals that we have put together over the past decade is amazing. They continue to get it done at an extremely high level. Most of you receiving this newsletter understand because you learned from or in some other way have been impacted by this group.

This year's update is filled with news and accomplishments. A lot transpired in the last year. I hope you enjoy reading about some of it.

Every year, this newsletter this motivates some of you to send an update. Please do. As always, if you are in the area, let me know. I would love to catch up with you. We can also do that virtually as well. I truly enjoy hearing about your exploits.

Skip

We began last year ultra conservative with the union vote very fresh and the process of developing the first bargaining agreement about to begin. No one knew how that would play out, but we anticipated changes in the way we operate. As the agreement process lengthened Miami settled into a "business as usual" operating mode. The bargaining agreement will no doubt change things to some extent, but by mid fall semester, we began operating as we did before the formation of the union. More to come on this in the coming year as there has been progress on the agreement.

This has been another solid year for ISA. Our faculty continue to focus on what is best for our students across all of our outstanding programs. ISA students place very well and our industry partners compete for the talent we provide. Knowing generative artificial intelligence will impact how and what we teach, ISA faculty have embraced it well and are providing leadership and insights for others on leveraging it in all aspects of what we do.

ISA continued their strong research focus this year. ISA faculty had fourteen publications in what the FSB regards as high quality journals. We also continue to be a leading department in receiving external grant funding to support that research. There continues to be a very diverse set of research interests in ISA faculty, but applications of generative AI seems to be garnering the most attention at the moment.

Growth in our majors also continued this year. The Business Analytics (BA) Major grew from 369 to 390. The incoming BA first year class this fall is our second biggest at 139. Our incoming cohort in our MS in Business Analytics (MSBA) stands strong at 35 and the Masters in Sports Analytics, in which we teach all the fall courses, has five incoming students. The Information Systems and Cybersecurity Management (ISCM) Major increased from 75 to 93 students.

One new permanent faculty joins our ranks starting this fall. Bill Myers is moving into an Associate Teaching Professor role focused on delivering the experiential components of the MSBA and our undergraduate BA practicum.

The Ernst & Young FSB Cybersecurity Initiative continued impacting students. In addition to our fall

Cyber Panel and spring Cyber Symposium, we launched a Tech and Cyber Summer Boot camp for under-represented high school students. The camp was fully funded through a combination of EY and US Bank funding and was free to all participants. (See page 3 for more). The ISCM major graduated nine students from the Cybersecurity Management Concentration in May, and is on track to double that in the coming year.

The MSBA graduated 35 students in its fourth cohort. 100% of our domestic students placed, but two of our international students are still looking. If you know of opportunities, please contact me. This year's average starting salary for those placed grew to more than \$80,500. The experiential projects went great this year. The Cleveland Guardians hosted two of the teams to a home game after their presentation.

In total, 62 BA, 25 IS and 9 Cyber majors graduated in the past year. Average starting salaries were well over \$75,000. We ended the spring 2024 semester with 702 students declared in ISA programs compared to 706 at that time last year. Currently we are at 674 declared students compared to 668 at this time last year. While our majors are growing, enrollments in our minors is waning a bit. This is a focus area for the coming year.

Thanks to all our partners and alumni who pitch in to help to make us great. Our success absolutely hinges on the amazing support we receive from our alumni and corporate partners. The time, knowledge, experience and financial support that you collectively provide truly enables us to continue to excel.

Budget uncertainties from shrinking state and university funding remain a concern. This combined with our ever-increasing need to constantly innovate curriculum and keep up with the rapid changes in our disciplines make us more reliant than ever on external support for success. Every little bit from our alumni and corporate partners helps and is greatly appreciated. If you are interested in contributing to our efforts in any way, please contact me or your favorite ISA faculty member. There is a link and URL on page 4 to make contributions directed to ISA at Miami.

I hope you enjoy catching up with what we have accomplished in the past year.



FARMER SCHOOL OF BUSINESS  
Department of Information Systems  
and Analytics

Department of Information Systems & Analytics  
800 E High St, FSB 3095,  
Oxford, OH 45056  
513-529-4826

## Faculty and Staff News:

### Dr. Fadel Megahed Promoted to Full Professor



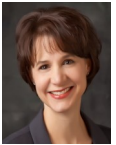
Fadel joined us in 2016 from Auburn University and has been on a fast track ever since. He received his Ph.D. in Industrial Engineering from Virginia Tech in 2012. Fadel is a prolific researcher with nearly 60 total academic publications, two thirds of those since joining Miami. He is also an excellent teacher who provides leadership in our Business Analytics efforts. Most recently he has dug into the emerging landscape of generative Artificial Intelligence. His ChatISA bot is helping our students learn and has made quite a splash. (More about ChatISA on page 3).

### Dr. Arthur Carvalho Recognized by the Association for Information Systems



Arthur was awarded Distinguished Member Status in the Association for Information Systems (AIS) early this summer. This recognition is awarded to long term AIS members who have played significant roles in AIS activities and published in AIS journals along the way. He served as an Associate Editor four times for Association conferences, reviewed articles for multiple AIS journals and his work has appeared 12 times in AIS journals or conference proceedings. He has represented Miami well in Association activities.

### Dr. Allison Jones Farmer to Wear the ISA Department Chair Hat



I will be taking a research/curriculum sabbatical in the fall. The ISA acting chair role will be assumed by Allison for the semester. She has been a tremendous leader in all things ISA since joining us in the fall of 2014. She put our Business Analytics program on the map, helped hire and mentor our amazing team of BA faculty, founded the Center for Analytics & Data Science, and led the development and launch of our Master of Science in Business Analytics among many other things. I am looking forward to her time in the chair seat. I will return to the chair role in the spring.

### Jay Palmisano Retires



Jay has been with us for 10 years, first in a visiting faculty role and the last five as an Assistant Teaching Professor. He was our utility instructor filling in where there was a need in our 100 and 200 level courses throughout his time with us. He taught Computational Thinking, BUS 104, IT and the Intelligent Enterprise, ISA 235, and Database Systems and Data Warehousing, ISA 245. He also led the BUS 104 team for two years and was instrumental in the redesign of ISA 235 several years ago. Jay was a favorite among his students and he will be missed.

### External Research Funding Continues

ISA faculty are working on external grants where Miami's share totals over \$600,000 and an internal grant for \$59,000. These efforts are funded by some notable organizations such as the NSF, NIH, and AFRL. Not enough room for pictures, but the contributing faculty include, Dr. Maciej Rysz, Dr. Maria Weese, Dr. Waldyn Martinez, Dr. Yicheng Kang and Dr. Ozge Surer. The subjects vary from motion studies of Bayesian analysis of nuclear dynamics to applications of machine learning. All involve new ways of leveraging data.

### Dr. Bill Myers moving into a Permanent Role

Bill Myers, who has been serving in a Markley Professorship and as our Data Science Executive in Residence has accepted an Associate Teaching Professor Position. Bill will continue to deliver the experiential components of our MSBA curriculum, and also add capacity to our undergraduate BA program.



### Two of our Faculty Stepping Up Their Roles in the FYIC



Two of our faculty are taking on additional responsibilities in the fall. Josh Ferris is the new Director of the First Year Integrated Core (FYIC) taken by all FSB first year students. Josh has been leading the team teaching BUS 104, the Computational Thinking course in the FYIC, for several semesters and now will lead the entire FYIC team. He will continue to teach Computational Thinking. Art Van Houten will be the Interim BUS 104 team lead while we conduct a search for Josh's replacement. We thank them both for stepping up.



### Other Highlights: Many other exciting things happened, a few are summarized in the bullets below. More details on some of them are provided in the following sections.

- ISA Students continue to garner some of the highest starting salaries in the division at \$74.9k and \$77.9k for ISCM and Business Analytics respectively.
- Planned and executed a set of four speaker/panel focused events for first year and undecided FSB students to increase interest in Information Systems and Cybersecurity Management. Total attendance was over 1000 students.
- Held our Second Cybersecurity Industry Panel in the fall and our Seventh Cybersecurity and Second Artificial Intelligence symposiums in the spring, all to packed crowds in Taylor Auditorium.
- Awarded \$24,450 in scholarships to ISA students at our spring awards event. Thank you to everyone who contributed!! (see page 4 for this year's recipients).
- Held our first Tech and Cyber summer boot camp for high school students from underrepresented groups.

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## First Annual ISA Summer Tech & Cyber Boot Camp Held



From July 17-20, 33 high school students attended a three day camp focused on Technology and Cyber issues and opportunities facing business and society as a whole. The camp was jointly funded by EY and US Bank. We thank them both for their generous support. Joseph Nwankpa, FSB Director of Cybersecurity Initiatives planned and organized the camp with the help of Assistant Director of Camp Pipeline Initiatives.

Campers spent three days at Miami learning about the role of Technology and Data in organizations and the need to protect those assets. They did hands on exercises in identifying phishing attacks, encryption and coding, heard about Tech & Cyber from EY and ISA faculty, and visited US Bank's facilities in Cincinnati.



The camp finished with a keynote address by one of our recent graduates, Evelyn Marchant. She spoke about her decision to study IS, her experiences in our ISCM program and Miami in general, as well as what careers in the field might look like. Of course the campers had a bunch of fun as well. Hopefully we will see some of them join our programs in the next couple of years.

## How will AI Disrupt ISA?

That is the \$100 question. One that will likely play out rather quickly though. I think the growth in AI presents great opportunity for ISA to provide leadership in both the division and for the university. Miami, like all organizations is working to "figure it out". AI will likely disrupt both how the university operates, but more importantly in my opinion, how we deliver our product which is an educated pipeline of next generation leaders and difference makers for society.

ISA faculty are on it. We are providing leadership in how to better leverage, especially generative AI, to help students learn. Jay Shan is representing the FSB on a university-level task force to determine best practices and a strategy for GenAI for Miami. Fadel Megahed has developed an interesting use case in the form of an ISA focused Chatbot to enhance ISA student learning of content in our curriculum. More on ChatISA elsewhere on this page. ISA faculty, throughout our programs and courses, are experimenting with a variety of things pedagogically to elevate student outcomes in their courses.

ISA faculty understand clearly that much of what we teach GenAI can explain or even mechanically do with appropriate prompts. Students are quickly figuring that out as well. Our faculty instill in ISA students appropriate uses of this rich tool that increase learning rather than just having a tool do tasks for them. For example, Chatgpt can create code eliminating the need for students to write it, but students must understand coding well enough to be able to modify, evaluate and correct, if necessary, the code generated. This will not be possible if the student has never written code themselves. These issues are not unique to ISA content. Chatgpt can generate great marketing material, HR development plans, draft business plans etc.

## Another Solid Year for Our MS in Business Analytics



The MSBA had another successful year. Under the leadership of Allison Jones Farmer, the Faculty Director, and Dennis Ferguson, Program Coordinator, have the program firing on all cylinders. We graduated a record 35 students in May. 100% of the domestic students are placed, with an average starting salary (without bonus) of \$80,500. The base salaries ranged from \$62,000 to \$130,000. Our incoming cohort has 35 confirmed students who will begin in August.

I wrote about the launch of a Sports Analytics Masters program last year that relies on the fall courses in our MSBA for foundational Analytics knowledge. We are discussing the possibility of a similar program in Supply Chain Analytics with the Management Department here in the FSB. More on that to come.



## Cybersecurity Students Help the City of Oxford



As part of our effort to foster experiential learning and better connect theories and knowledge learned in the classroom to real-world situations, Joseph Nwankpa's Information Systems and Cybersecurity Management students partnered with the City of Oxford to worked on a cybersecurity project. Students in ISA 405 (Information Security) were tasked with reviewing and assessing the security policies of the City of Oxford with the goal of identifying and evaluating how well the city's newly developed policies addressed emerging cybersecurity threats and risks.

The students were able to assess and provide actionable recommendations on revising and updating the policies to reflect the current threat landscape and better position the city. The City of Oxford representatives were particularly pleased with the reports and recommendations and look forward to our continued partnership.



## ChatISA Adding Value to our Students

Over the past year, ISA students have gained a powerful new ally in their academic journey - [ChatISA](#). This innovative, in-house AI Chabot has changed how our students approach coding, project management, exam preparation, and job interviews.



Developed by Fadel Megahed and Joshua Ferris (with significant contributions from Allison Jones-Farmer and Gabe Lee), ChatISA ad-



addresses a critical need in today's rapidly evolving technological landscape. As AI becomes increasingly prevalent in the workplace, it is essential that our students not only understand these tools but also learn how to leverage them effectively. ChatISA provides equitable access to advanced AI resources, ensuring all ISA students can benefit from this technology regardless of their financial means.

While ChatISA has been a game-changer for many students, ISA faculty emphasize it as a tool to enhance learning, not replace critical thinking. Students are encouraged to use the tool responsibly and always apply their own analysis and problem-solving skills. It is definitely being put to good use. The bot was getting over 5,000 queries per month in the Spring.

## ISA Faculty Shine at ASA's Joint Research Conference

ISA faculty were quite involved in the recent Joint Research Conference on Statistics in Quality, Industry and Technology held in Waterloo Canada. Allison Jones Farmer was one of the Plenary speakers for the conference. She spoke about how artificial intelligence is shaping the future of analytics practice, research and education. She also chaired the *Journal of Quality Technology* invited research session. Allison also serves as the Editor in Chief for *JQT*.



Maria Weese served on the Scientific Program Committee for the conference and also chaired a session on screening experiments and applications. Fadel Megahed gave an invited talk about his research in Generative AI focused on industrial statistics and large language models. Finally, Yicheng Kang gave an invited talk on intelligent quality monitoring and diagnosis.



## ISAO Visits 84.51 & Kroger

Our student organization, ISAO, organized a trip for members to visit 84.51 and Kroger in April. Nine ISAO members spent the morning at 84.51 headquarters in downtown Cincinnati and had lunch with their president, Milen Mahadevan. They then headed to the Kroger Technology Center in Blue Ash, where they spent the afternoon witnessing agile development in action.

Kudos to our advisory board partners, Linda Howard from Kroger, and Todd James from 84.51 for helping to make this happen. Similar field trips are already in the works for ISAO in both the fall and spring semesters.



## What's in Store for 24/25

- Continue to provide leadership for Miami and the FSB in the transformational impact of on what and how we teach.
- Support the division in the development of Tech, Cyber, and Analytics programming
- Learn to continue to innovate and effectively operate in the newly formed unionized environment at Miami.
- Focus on growing the IS and Cybersecurity Management program enrollments
- A careful review and modification, if justified, of our current IS curriculum.
- Continue advancing the Cybersecurity Initiative in the department and the division with a focus on establishing our niche and delivering it well.
- Support FSB's strategic efforts to increase data and technology skills and knowledge in all FSB graduates.
- Engage our industry partners in more creative and mutually beneficial ways.
- As we grow, increase our focus on the strong sense of community that has always been a part of ISA faculty and students.

## Interested in Helping the Cause? We Rely on External Support for Success

We have highly regarded and successful programs. Keeping up with the rapid changes in industry uses of tech, cyber, and analytics is a must to keep them that way. ISA faculty must work continually to learn new technologies, methods and the issues our industry partners face.

Just like our industry partners, we must continue to learn and use that knowledge to evolve our programming and stay ahead of our growing number of competitors. Continuing to evolve ISA programs and deliver both the quality and quantity of our pipeline of ISA students takes resources well beyond our slice of the university pie. Our external funding has become a lifeline to success.

We are very appreciative of the support we get from all of you. We rely on external funding for:

- Faculty development and training on emerging tools and techniques in IS, Cybersecurity, and Analytics
- Curriculum and course development efforts
- Cloud Resources, Software, and Hardware necessary for all of our ventures
- Research Support to keep in touch with evolving business processes and issues faced and to play our part in expanding the field of knowledge.
- Events to attract and retain students into our ISA programs
- Student-focused events that enhance the educational experience of ISA students

If you would like to contribute financially, simply click on the image or copy and paste the URL into a browser.



<https://securelb.imodules.com/s/916/16/interior-flah.aspx?sid=916&gid=1&pgid=6010&cid=11236&dids=98&bledit=1>

If you prefer, you can mail your gift directly to me at the address on page one. Please make the check payable to Miami University and write Information Systems & Analytics on the memo line.

**Remember that no gift is too small. Every little bit helps.**

Thank you in advance for your support. If you have any questions please contact me directly at 513 529-4835 or [benamajh@MiamiOH.edu](mailto:benamajh@MiamiOH.edu).

## ISA Student Best of Graduates and Scholarship Recipients



**Samantha Erne**  
Best  
Business Analytics Major



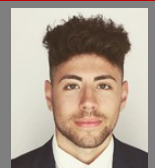
**Evelyn Marchant**  
Best  
Information Systems Major



**Jason Botts**  
Best  
Information Systems Minor



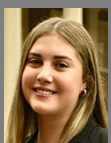
**Lydia Geygan**  
Best  
Cybersecurity Minor



**Cameron Resatar**  
Best  
Business Analytics Minor



**Ella Pugh**  
US Bank



**Jenna Wise**  
US Bank



**Grace Koo**  
US Bank



**Tara Hoffman**  
US Bank



**Levi Grimm**  
EY



**Morgan Danko**  
EY



**Sonja Kristianson**  
EY



**Emma Gough**  
EY



**Harrison Moses**  
EY



**Katie Ross**  
KPMG



**Rose Goldenberg**  
M.A. Morgan



**Nicole Mater**  
M.A. Morgan



**Kyla Lively**  
M.A. Morgan



**Lauren Pagel**  
M.A. Morgan



**Rylee Elling**  
ISA Adv Bd



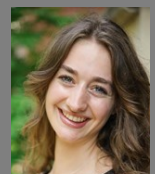
**Clare Ngo**  
ISA Adv Bd



**Nicholas Stanis**  
ISA Adv Bd



**Dylan Siudak**  
ISA Adv Bd



**Mallory Stiles**  
ISA Adv Bd