

# Information Systems & Analytics

Summer 2023 Newsletter Volume 12

# 2022/23 - A year of Change

Hi Everyone,

I hope you enjoy reading this update. I definitely enjoy both reflecting on and

sharing what's happening in ISA at Miami with you.

Just as our faculty and students started getting their feet back under them from the pandemic, new changes to academics arose. The biggest is ChatGPT. It has raised quite a debate about the role it should play in education. I find that fascinating and look forward to figuring it out together. Generative Al will quickly be impacting much of what we all do.

Here in ISA, we will figure out its place as our curriculum continues to evolve and our programs grow. There is a lot to be excited about, as you will see in this summary of the year.

Please stay in touch. If you are in the area, let me know so we can catch up. ...or send me an update or let's connect virtually. I truly enjoy hearing about your exploits.

Skip



FARMER SCHOOL OF BUSINESS

Department of Information Systems

and Analytics

Another year has flown by. I expected the focus for the past year to be on creating a new normal coming out of the pandemic. We did well adjusting back to a more fully face-to-face way of operating that also leveraged what we learned during Covid. We did this while additional change came at us in many forms. Some examples include; continued rapid advances in the technology and data driven decision making landscapes, a new Miami Provost; shifting student learning styles; a very tough economy, and we certainly can't overlook generative Artificial Intelligence tools (ie. ChatGPT). Add the uncertainty leading up to Miami's unionization vote and preparing for some impactful pending state legislation such as Ohio Senate Bill 83 and this turned out to be a very interesting year.

I am proud of the response of the ISA faculty who never wavered from our mission. They do not always agree, which is not surprising as we now number 25 permanent ISA faculty. They do get incredible things done though. Their laser focus on what is best for our students preparation for life and careers beyond Miami is very impressive. They continue to perfect a more tech-supported delivery of course content while at the same time challenging our students in traditional ways that leverage our expertise in face-to-face education to help students problem solve, think critically and become life long learners.

ISA faculty continue to expand the field of knowledge through their scholarship as well. We published in many top quality publications and continued external grant success this year. The diversity of our faculty scholarship makes it hard to list all of the successes, but some will be highlighted in this letter.

Growth in our majors also continued this year. The Business Analytics (BA) Major grew from 307 to 369 and the Information and Cybersecurity Management (ICM) Major from 34 to 75 . The fall 2023 incoming class of BA students is our biggest ever with over 150 students. Our incoming cohort in our MS in Business Analytics also grew from 19 to 35 or so and the new online Masters in Sports Analytics, in which we teach all the fall courses, has eight incoming students.

To help support growth, one new tenure track faculty and two new permanent teaching professors will join us in the fall. We also hired a half time Markley visiting Executive Professor. See page 2 for details.

The Ernst & Young funded FSB Cybersecurity Initiative is going strong. The ICM major graduated its first two students in May, a Cybersecurity Management for Accountancy Certificate launched, two successful large scale events were held, and grant programs for cyber curriculum and research began.

The MSBA Graduated 14 students in its third cohort. Placement was tougher in this economy. Some 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 \$78,000. Our incoming cohort will likely be our largest yet at more than 35 students.

Seventy BA, 44 IS and one Cyber major graduated in the past year. Average starting salaries were well over \$70,000. We ended the spring 2022 semester with 706 students declared in ISA programs compared to 682 at that time last year. Currently we are at 664 declared students compared to 615 at this time last year.

Recognition of ISA faculty contributions continued in 22/23. Dr. Jay Shan was named the Rose-Marie Garcia Anderson Assistant Professor, Dr. Fadel Megahed received the Miami University Faculty Scholar Award and Drs. Vivian Chen and Joseph Nwankpa both received Smucker's Teaching Excellence awards. We also had two faculty promotions in the department. Details on page 2.

Thank you to all of our partners and alumni who helped to make all of this possible. Our success hinges on the amazing support we receive from our alumni and corporate partners. The time, knowledge, experience and financial support that you collectively add to the mix truly enables us to continue moving the needle.

Budget uncertainties from shrinking state and university funding combined with our ever increasing need to constantly innovate and learn make us more reliant than ever on external support for success. Every little bit from our alumni 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 also a link and URL on page 4 to make contributions to directed to ISA at Miami.

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

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## **Faculty and Staff News:**

### Dr. Fadel Megahed Receives Miami University's Faculty Scholar Award



This award honors three Miami faculty annually who whose sustained excellence in research or other creative activity has brought them prominence in their fields. Fadel has published more than 50 journal articles, over 30 since he joined us in the fall of 2016. He is currently an Endress Associate professor and held the Neil R. Anderson Endowed Assistant Professorship prior to his promotion to Associate Professor in 2020. He is the case study editor for the *Journal of Quality Technology* and serves on the review boards for several other journals.

#### Dr. Jay Shan Named Rose-Marie Garcia Anderson Chaired Assistant Professor

The Rose-Marie Garcia Anderson Chaired Assistant Professorship is awarded to promising junior faculty who are successful in both teaching and research. Dr. Jay Shan teaches upper level data-focused courses in our undergraduate programs as well as in the MSBA. He is a leader in Al Initiatives in the FSB and has two FT50 publications since joining us. This professorship is solid recognition of Jay's accomplishments.



### Dr. Joseph Nwankpa & Dr. Vivian Chen Receive Teaching Excellence Awards



The FSB annually recognizes it best teachers. Joseph received the Richard T. Smucker Teaching Effectiveness Award for Junior Professors and Vivian for Teaching/Clinical Professors. Both play key roles in the ISA curriculum. Joseph provides leadership in all of our Cyber curriculum and is the Director of the EY FSB Cybersecurity Initiative. Vivian coordinates and leads the team of faculty teaching our Principles of Analytics course in the FSB Core. I speak to many of their students and they are excellent teachers.



### **Faculty Promotions in ISA**

**Dr. Joseph Nwankpa** was promoted to Associate Professor. Joseph joined us in 2017 from University of Texas Rio Grande Valley. He received his Ph.D. from Kent State University in 2012. He is an excellent teacher/scholar and provides leadership in our Cyber efforts. He has published many solid works in outlets such as *European Journal of Information Systems, Information & Management, Communications of the AIS* and others.



**Dr. Carol McGuire** was promoted to Associate Teaching Professor. Carol joined us in Fall 2016 and received her Ph.D. from Case Western University. She coordinates and leads the design and delivery of our Information Systems course in the FSB core. She is currently developing a hybrid approach to teaching the IS core class and is sharing what she learned with other universities at major conferences.



### More Research Funding Success

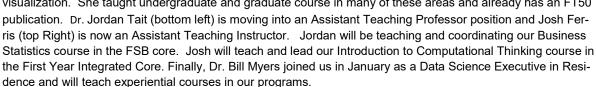
ISA faculty are currently working on close to \$750,000 (Miami's share) in external grant funding. The funding comes from some notable organizations including the NSF, NIH, NIOSH, and AFRL. Not enough room to include pictures, but the contributing faculty include, Dr. Fadel Megahed, Dr. Maciej Rysz, Dr. Maria Weese, Dr. Waldyn Martinez and Dr. Ozge Surer. The subjects vary from motion studies of Baysian analysis of nuclear dynamics to the sensor based study of worker fatigue. All involve new ways of leveraging data. In addition to that Dr. Yicheng Kang and Dr. Ozge Sure were part of a team awarded close to \$60,000 in internal funding.



### **New Faculty Members**

We are excited to welcome a new faculty Assistant Professor this fall. Dr. Rayna Xu received her Ph.D. from City University of Hong Kong in 2020. Her research interests are FinTech, AI, ML, Healthcare Analytics and Blockchain. Her teaching interests are programming, AI/ML, cloud computing, distributed computing and data visualization. She taught undergraduate and graduate course in many of these areas and already has an FT50 publication. Dr. Jordan Tait (bottom left) is moving into an Assistant Teaching Professor position and Josh Fer-







### Other Highlights:

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

- We held our First Cybersecurity Industry Panel in the fall and our Sixth Cybersecurity and First Artificial Intelligence symposiums in the spring, all to packed crowds in Taylor Auditorium.
- We awarded \$19,000 in scholarships to ISA students at our spring awards event. Thank you to everyone who contributed!! (see page four for this year's recipients).
- Our ISA student mentorship program connecting new and upper level ISA students continued this
  year. We held a community building event in both semesters. Unfortunately the ISA faculty team
  did not win at trivia this year.



# EY Cybersecurity Initiative Gains Steam



The Cybersecurity Initiative had an impressive second year. Director Joseph Nwankpa, had a good year. He added a summer Cyber curriculum grant program to pair with the Cyber research grant program launched last

year. Two faculty are using grants to revise or add cyber content to courses in Accounting, Finance and ISA. There are also three initiative-funded research projects this summer.

We launched the Cybersecurity Management for Accountancy Certificate. The certificate is to serve accountancy students, who wish to be well prepared for the new, optional, Cybersecurity section of the CPA exam.

A fall Cyber Panel series event was added in the fall semester. This is in addition to the Annual Cybersecurity Symposium. See the Practice to Life section below for details.

This year, Joseph plans to develop a podcast series highlighting the exploits of former students, grow the Cyber momentum in the FSB and raise our profile externally when he can. Here are two recent examples in <a href="Entrepreneur">Entrepreneur</a> and <a href="CSO">CSO</a>.

Thank you EY for having the vision and investing in this important business need. We will move the needle much quicker and in more impactful ways with this funding in place.

### **ISA Brings Practice to Life**

In ISA, we work hard to bring practice to life. We held three major division-wide events this year. In



the fall, Dr. Joseph Nwankpa launched a Cybersecurity Panel Series. The first annual panel included Brigadier General Terin Williams, Cyber Advisor for the Department of Homeland Security, Eileen Brown,

Principal in EY's security practice and Greg Barnett, Global Cyber Defense Lead at FIS. The panel discussed evolving cyber threats and the role of various stakeholders. Over 230 students and faculty from across the university attended.



Dr. Jay Shan, organized our Al symposium in February, Shannon Terry, SVP & Chief Advanced Analytics Officer from Nationwide and Michael Chorey, Al Project Manager with Wendy's led a great discussion on the Future of Busi-

ness with ÅI. 125 students attended.

In March, Dr. Joseph Nwankpa organized our sixth annual Cybersecurity symposium featuring Nick Spurlock, Senior Mgr. with EY and Robert Williams, VP of Go-To-Market with Palo Alto Networks. The topic was Cyber Resiliency in the Digital World was well received by the over 150 students attending.

In addition to these major events and countless industry speakers we bring into our classes, ISA faculty bring practice to life in many other ways. Almost all of our upper level analytics courses require that students solve problems using "real" data. In some courses students must scrape together and combine data from multiple available sources just like industry professionals would. We also have a group of students develop a website for a local food pantry and continue to have PwC run an IT case in our IT Risk and Governance course

# MS in Business Analytics Continues to Roll...and Grow

Our MSBA Program completed a successful third year. Sixteen students graduated in the spring. Placements remained solid, especially for our domestic students, but a combination of the economy and tightening immigration regulations made it difficult for our international students. Average starting salaries were up again to over \$78,000.

The big news about the program is growth. Our incoming cohort looks to be at least 35 students. That's 90% year to year growth. Even more importantly, the bulk of the growth is in Miami students staying for an extra year to enhance their career opportunities by adding analytics to their tool kits. This is exactly what we envisioned when we designed the program. We hoped it would become an important factor in attracting high quality undergrads to Miami across campus because they can leave Miami in four or five years with an undergrad degree in almost any discipline combined with our MSBA.

ISA faculty created and will deliver online versions with a Sports Analytics focus of the first semester MSBA courses. This was key to the launch of a new Masters in Sports Analytics created in partnership with the Department of Sports Leadership and Management. Programs like this with our fall foundational certificate as a basis were also part of our original design of the program. It is great when a vision comes to fruition.

In the winter and spring terms, Business Analytics Practicum teams of three to four completed projects for five industry partners. Express, Fifth Third Bank, DHL, Total Quality Logistics, and Kolar all provided interesting projects and worked closely with our students to solve them. The practicum was taught by



Myers. Bill recently retired from a 30 year career at P&G. For the last 20 plus years Bill led P&G's corporate statistics training. He joined us in January as a Data

Science Executive in Residence and is moving into a Markley Visiting Executive Professor position in the fall. He brings a wealth of experience to share with our students and we are lucky to have him.

Finally, Dr. Allison Jones-Farmer was named



the Faculty Director for the program. She has been a key architect and overseer of the program from its beginning. Without her we would not have the program. We also hired Dennis Ferguson into a

Staff Coordinator position to help Allison strategize and perform many of the operational level duties needed for the program.



### **ChatGPT Having an Impact**

To say generative AI such as ChatGPT impacts us all is an understatement. Many of you must feel this as well. These types of technology are going to fundamentally change how work is done. This is true in business and academia as well as in our personal lives.

Initial reactions here when ChatGPT was released in the fall were mixed from locking it down and controlling student use to embracing it and encouraging students to use it by teaching them how to do so effectively. I think we still have a solid mix of both here at Miami.

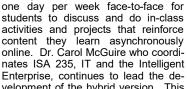
In ISA we hope to become leaders in the effective use of this technology, not only in how we design and deliver our programs, but also how we prepare our students for future careers with these technologies as an important part of their toolkit. We are also motivated to help extend the field of knowledge in generative AI. Here is a link to an interesting article published in February in Quality Engineering journal co-authored by three ISA faculty.

We are having a healthy debate on what we must change in both what and how we teach. Much more to come on this I am sure.

# Other Program and Curriculum Highlights

There are plenty of other exciting things going on in ISA. This section highlights some of our recent and soon-to-come programming.

#### **Hybrid ISA 235 Version**



The hybrid version of ISA 235 meets



Enterprise, continues to lead the development of the hybrid version. This year one of our new Assistant Teaching Lecturers, Michael Gowins, join the effort.

Almost half of the sections of the course were offered as Hybrid sections. This seems to be playing out well for most students. The online pedagogy does not fit all students' learning styles. Offering sections taught both ways allows students to self select into the pedagogy of their choice. We will offer both types again this year.

#### **ISA Community-Building Efforts**

Our large number of first year students don't take ISA specific courses until year two. Thus, they spend that first year fairly isolated from the rest of the ISA community. To both solve this problem and strengthen the sense of community in our upper level students, we have begun a mentorship program to connect incoming students with our established students.

Our student organization, ISAO, is leading the mentorship program as a key part of their charge. In both the fall and spring semesters, we organized events to offer all ISA students and faculty a chance to get to know each other better. The fall event focused on the mentorship program. In the spring, we had an ISA trivia night. Teams of students and faculty competed. Last year faculty dominated, not so this year...

### What's in Store for 23/24

- . Lead the FSB to an increased focus on Al. especially generative AI, both in what and how we teach.
- Help launch the Masters in Sports Analytics.
- Learn to continue to innovate and effectively operate in the newly formed unionized environment at Miami.
- Mangae the continued enrollment growth in all of our academic programs
- . Continue advancing the Cybersecurity Initiiative in the department and the division with a focus on establishing our niche and delivering it well.
- Support FSB 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 part of ISA faculty and students.
- · Support other areas of campus in their efforts to grow data and tech knowledge in their graduates.

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

The quality of our programs is outstanding. Keeping them strong requires us to constantly learn new technologies and methods as well as keep up with changes in what our industry partners are doing. Continuing to evolve ISA programs and deliver both the quality and quantity of our pipeline of ISA students takes resources beyond our slice of the university pie.

Just like our industry partners, we must continue to learn and use that knowledge to evolve our programming, to stay ahead of our growing number of competitors. Because we tend to innovate far more that the typical Miami academic department, our needs in these areas are much more than and we are woefully underfunded by the university.

We already rely heavily on financial support from outside the university for success. The most important areas where ISA could use outside gifts are:

- Faculty development 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.

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



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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.

### ISA Student Best of Graduates and Scholarship Recipients



Aidan McGaughy **Business Analytics Major** 



**Madeline Begalke** 





**Katelyn Hartings** 

Information Systems Minor



**Carly Schechtman** 

Cybersecurity Minor



**David Limauro** 

Best
Business Analytics Minor



Brynn Gage **Dbl Barrel** 



Doria-Rose **Dbl Barrel** 





Kyle Le Dbl Barrel





Diksha Gulati EY



Clara NGO EY & ISA Adv Bd



Elle Prusko EY



Robinson



Maria Bengel



Levi Grimm KPMG



Sophia Shelton **KPMG** 



Sarah Chase
ISA Adv Bd



Sara Lee ISA Adv Bd



Audrey Malenfant ISA Adv Bd



Kati ZepahuaISA Adv Bd



Ella Pugh TM Rajkumar



Cameron Tiefenthaler