

Information Systems & Analytics

Summer 2019
Newsletter
Volume 8

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2018/19 Was Another Good Year for ISA

Hi Everyone,

It is hard to believe this is the eighth time I have written our annual newsletter to keep you all up to date on what's happening in ISA. It is hard even for me to keep up, so I know how some of you must feel.



The past year was no exception. There is plenty of exciting news packed into these four pages. I hope you enjoy catching up with us. Lots of you remain engaged in many different ways and I always enjoy the time I get to spend catching up with many of you.

For others, please do stay in touch and if you are ever in the area, be sure to let me know so we can catch up. If you can't come back, send me an update or connect with me virtually. I love to hear of your exploits.

Skip

To say the past year was an eventful one for ISA would be an understatement. I think we surprised ourselves with how much we accomplished in 2018/2019. In a time of great uncertainty in higher education, ISA laid a solid foundation upon which we can continue to grow talent, deliver a flourishing pipeline of capable students, and also begin to think about how we can serve industry partners in other ways to meet growing needs for technical and analytical expertise. I hope you are as proud as I am of what ISA has accomplished in the past year.

None of this would be possible without the amazing support we receive from our alumni and corporate partners. We have an outstanding group of faculty, very capable students and top notch facilities, but the financial support, time, knowledge and experience that you collectively add to the mix truly enables us to keep the needle moving.

Higher education is headed for much tougher financial times. Miami is not immune to this trend. For ISA to continue to lead both here at Miami and beyond, we will need to leverage our external resources even more going forward. We hope to do so in ways that are mutually beneficial. One of our key goals is to become more than a go to place for analytical and technical talent, and to become a regional or national center of expertise in our disciplines which supports our community and industry partners.

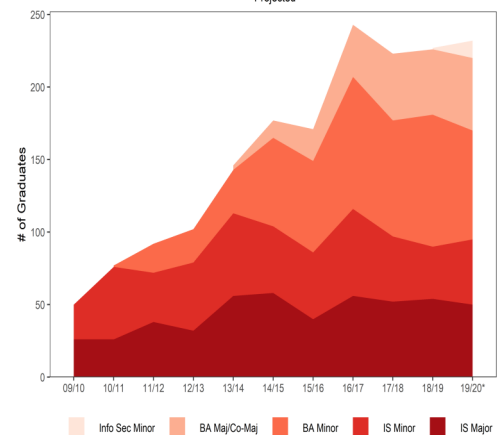
All of our major curriculum initiatives advanced nicely this year. Most are described in detail on Page 3, but here are the highlights.

As predicted last year, the tracked ISA major more than doubled in size from 82 to 165. Combined with the remaining IS majors and the Analytics co-majors, our number of declared ISA majors is 98 (IS) and 113 (BA) respectively. For the first time, we currently have more analytics majors than IS majors. We are working to separate the tracked ISA major into two standalone majors to alleviate confusion that has obviously developed about what we do and do not offer. That will happen soon.

In a little less than 9 months, we took the early stage ideas for the MS in Analytics I mentioned last year all the way through state approval. This was a monumental effort by our faculty. Now the real work has begun as we are developing the 10 new courses needed for a fall 2020 launch of the program.

Our cybersecurity initiative took two big strides this year. First, our Information Security minor launched in the fall, graduated its first student and has 29 students in the coming fall. Also, we received seed money from Miami's Boldly Creative Initiative to pursue a unique collaboration with the Political Science and Computer Science and Software Engineering Departments to develop a strategy for Cybersecurity at Miami. We held a security summit this summer with high level security talent from almost twenty organizations to help develop this strategy.

ISA Graduates by Academic Year
*Projected



Our blockchain course was delivered for the first time in the spring semester. Thirty students took advantage of the opportunity and we are offering it again in the coming semester. Two other new courses are in the works as well. Data Driven Security and Artificial Intelligence in Business. We will also be rolling out some seminars for FSB faculty in applications of AI across disciplines.

Enrollments held strong with 227 ISA graduates in 18/19 compared to 223 last year and we ended the spring 2019 semester with 695 students declared in our programs. We anticipate only slight growth in the coming year, but with a new MS program to start up, that could be a good thing.

We have six new faculty joining us in the fall, five ISA faculty were promoted, three became newly named professors, and another won the divisional teaching award. That was all internal recognition. We also had faculty giving keynote addresses and receiving best paper awards at major conferences, as well as being recognized for their service to the field. This list could go on. Read on for details.

Thanks again to all of our partners and alumni who helped to make it possible. Given the projected financials for higher ed. we will likely become more reliant on external support to continue to move the needle. Every little bit helps and is greatly appreciated. See page four for details on how to earmark financial contributions you make to Miami directly to ISA. If you want to help in other ways, reach out to me or your favorite ISA faculty.



Faculty News:



Farewell to an Old Friend—Dr. Jeff Smith Passed

Jeff lost his hard fought battle with cancer last fall. He definitely left his mark on ISA and will not be forgotten. I personally believe that I would not be the department chair that I am today without all of the mentorship that Jeff provided during and well beyond the transition. We became very close friends in the process and I miss him dearly. Those sentiments are shared by many of us in ISA. Many of you who are reading this I am sure remember him fondly. Farewell old friend...

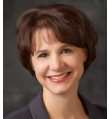
Dr. Maciej Rysz & Dr. Chad Anderson—New Assistant Professors



Maciej Rysz (to the left) and Chad Anderson (on the right) will both join us this fall. Maciej received his PhD in Industrial Engineering and an MS in Mechanical Engineering both from the University of Iowa. Since 2014 he has been at the University of Florida first as a post doc then as a Research Assistant Professor. He will be teaching our Optimization course in the fall. Chad received his Ph.D. in Information Systems from Georgia State University in 2011 and his MBA from Eastern Kentucky University in 2006. Chad is joining us after short stints as associate professor at both University of Nevada Reno and Northern Kentucky University. He will be teaching the IS Strategy capstone course.



Dr. Allison Jones Farmer Delivers Keynote



Allison was invited to deliver the prestigious Youden Keynote Address at the Fall Technical Conference of the American Statistical Association in West Palm Beach, FL in October. Her talk entitled "Leveraging Industrial Statistics in the Data Revolution" received a standing ovation.

Three New Named ISA Professorships

Dr. Maria Weese is a Richard T. Farmer Endowed Assistant Professor

Dr. Arthur Carvalho is the Dinesh and Ila Paliwal Innovation Chair

Dr. Fadel Megahed is the Miami University Neil R. Anderson Endowed Assistant Professor

Promotions

Pat Schur to Senior Clinical Lecturer, **Susan Cramer** to Associate Clinical Lecturer, **Jay Palmisano** to Assistant Lecturer and **Carol McGuire** and **Bob Leonard** to Assistant Teaching Professor

Other Faculty Recognition

Dr. Sooun Lee received the annual John E. Dolibois Faculty Award for Innovation in Global Programming for his work on the Korean Olympics study abroad trip

Dr. Carol McGuire received the Richard K. Smucker Teaching Excellence Award as the Outstanding Clinical Professor

Dr. Gabe Lee received the Outstanding Service Award from the Association for Information Systems Special Interest Group on Human Computer Interaction

Dr. Jay Shan received a Best Paper Award at the Pre-ICIS workshop on e-business

Dr. Chai Sambhara received a Best Paper Award in the IT Implementation, Adoption and Use Track at the International Conference on Information Systems (ICIS)

New Visiting Faculty Members

We are also pleased to announce four new visiting faculty members joining us in the fall. Dr. Wei Chen, Ph.D. in Statistics from UNC Greensboro and Bradley Metzger, MS in Operations Research from Georgia Institute of Technology will both teach ISA 225, Principles of Analytics. Dr. Javad Abed, Ph.D. in Information Systems forthcoming from Virginia Commonwealth University and Barb Myers, MBA from University of South Carolina, will both teach BUS 104, Introduction to Computational Thinking.

Other Highlights:

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

- We designed a Masters of Science in Business Analytics completely through the State approval process. Target start of Fall 2020.
- Our department advisory board met both semesters and provided great insight and feedback on our curriculum directions.
- We launched our Information Security Minor.
- We held our third Cyber security symposium in the spring.
- Datefest grew even more this year and was a huge success in the spring.
- ISA played a role in three of the funded boldly creative projects, the Analytics, Cyber Security, and the Masters of Science in Management all received funding.
- We held our eighth annual ISA recruiting event in the fall that was attended by fourteen of our Advisory Board companies.
- We awarded \$22,500 in scholarships to ISA students at our spring awards event. Thank you to everyone who contributed!! (see page four for this year's awardees.)

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Masters of Science in Analytics Program

Through a phenomenal effort by ISA faculty and careful attention to the approval process, we were able to take a back of the napkin design for our new MS in Business Analytics (MSBA), which was all we had at this time last year, completely through state approval in May. That may seem slow, but that is lightning fast in academics.

During this effort, we also wrote a proposal for funding through the Miami Boldly Creative Fund for new initiatives and received adequate funding to launch the program in the fall of 2020. We are currently busy designing the 10 new courses needed for the program and hiring a Director to oversee program development, build the external relationships for the experiential components and recruit the first class for the program. We hope to have this person in place by mid October.

The MSBA is a full time, face to face, nine month program, targeted toward anyone with a undergraduate degree (regardless of discipline) and an interest/passion for data driven decision making. It will be offered as a combined (or plus one) degree option to high caliber Miami students.

The program is delivered in two stacked certificates. Fall semester, students will take a core certificate providing a base platform for doing analytics then in the spring they take a more advanced business analytics certificate that goes into big data methods, machine learning, prescriptive analytics and more. This is rounded out by an experiential component involving project work for an industry client that begins in winter term and is completed in the spring semester.

If you know any good candidates for our first cohort of 25 students, send them our way.



New ISA Courses Coming in AI and Data Driven Security



Dr. T.M. Rakumar and Dr. Fadel Megahed each received funding to develop new courses to add to the mix in the division. Raj will develop a course in Artificial Intelligence in Business available to all business students. He has also been funded to develop seminars to bring faculty from across the FSB up to speed on the applications and potential impact of AI on business disciplines and industries going forward.

Fadel's Data Driven Security course is an additional elective in our Analytics and Information Security programs. The course will be offered for the first time in the coming spring. The AI course will be delivered in the 2020/21 academic year.



Collaborative Cybersecurity Initiative Gains Momentum

Our new Information Security minor, which includes classes from Computer Science (CSE) and Political Science (POL), launched last fall. We graduated our first student in May and the program currently has 30 student declared.

This was a first step in a strategy to leverage the combined managerial and risk perspective of ISA with the technical security expertise from CSE and the security policy knowledge of POL into a truly unique, well balanced set of program options over time. We envision leveraging the expertise that it will take to deliver this program in other ways to serve industry partners going forward.

Using seed money from the Miami Boldly Creative Fund, we held a Cybersecurity Summit on July 29th. We brought in 20 high level experts from a variety of industry and organizational perspectives to help us develop our unique strategy that would leverage Miami's strengths and fill an unmet need. We will use the information gathered from the summit to form our strategy and create a second round Boldly creative proposal to fund the execution of that strategy.

Blockchain Interest Marches On

Blockchain continues to gain momentum in the FSB. Thirty students completed a Blockchain and Business Applications course, taught by Dr. Arthur Carvalho offered for the first time in the spring semester.



The MU Blockchain Club under the guidance of Dr. Carvalho and Dr. Jeff Merhout hosted a Blockchain Conference in February that brought in speakers from seven Ohio organizations to share their knowledge and vision for the technology with a room full of students and working professionals. (for more info on the conference click [here](#)...

MUBC plans to make the conference an annual event and this fall MUBC will be holding a Blockchain hackathon. It is fun to see that take shape.

Third Cybersecurity Symposium Draws a Crowd

On April 16, we held our third Cyber Security event. Cyber Security professionals, Brian Minick (5/3rd) and John Quimby (IBM) shared their perspectives and some war stories from their cyber experiences as well as delivered some individual level cybersecurity things to think about to a packed crowd in Taylor Auditorium. Students and faculty attending the event were enthralled and the Q&A session discussed some very interesting questions. We look forward to an even bigger event in the coming year as Miami continues to roll out its strategy for Cybersecurity education.

Information Systems & Analytics Major Slated to Split into Separate IS & A Majors

Our two-year old ISA major with separate tracks for Information Systems and Analytics is flourishing. We have almost 160 declared students fairly evenly split between the two tracks. What we have come to realize is that the combined major is causing some serious confusion among our key stakeholders. Even though the two tracks are essentially IS and Analytics majors. Students believe that the tracked ISA major is more of a blend of the two disciplines than it is and we have students very interested on either IS or Analytics, not enrolling in either program because they believe they will have to take too much of the other area and are not interested in doing so.

Our industry partners also struggle to clearly differentiate as well as categorize students across our two areas of focus. The final straw was when our FSB advising office made us aware of the difficulties the combined major creates when advising students.

As a result, we are splitting the program into separate majors in Information Systems (the IS major is back) and Business Analytics (now a stand alone major) We are well along the approval process to get this done and hope this is in place by the end of the academic year.

Other Program and Curriculum Highlights

Out of necessity and arguably more so than any other disciplines in the division, Information Systems and Analytics offerings constantly evolve. This page attests to many of our big curricular efforts. However, drilling down, there are plenty of other changes that are happening or have happened. Here is a summary of some of these additional changes.

ANALYTICS CURRICULUM NOW R BASED

We completed the process of moving from SAS to R for our analytics curriculum. Analytics students are now exposed to R beginning in their first course past the business core as well as the remainder of the analytics major and minor.

PYTHON GROWS IN THE CURRICULUM

Just as we moved to R, we are now considering an increasing role of Python in our ISA curriculum. Our one required programming course for all IA & A has been in Python for several years. This spring we delivered our upper level web development course using Python for the first time and we have plans to convert the Computational Thinking course in the First Year Integrated Core to Python for Fall 2020.

ALL FSB STUDENTS GET MORE TECH AND DATA

If you are not aware, all FSB graduates (regardless of major) now take 14 credit hours of technology or data driven decision making coursework as part of the required business core. ISA faculty oversee all of this and soon will be teaching 11 of those 14 hours.

If your organization is looking for tech and data savvy business school graduates, the FSB is the place to come. We are now working hard to help all FSB majors increase Tech and Data usage in their programs.

ISA Student Award Winners

Best of Graduates



Dominique Van Howe
Best Business Analytics
Major



Jacob Brown
Best Information Systems
Major



Nicholas DiFilippo
Best Information Systems

Kien Nguyen
(No photo)
Best Business Analytics Minor

Scholarships

Sponsor Needed for Analytics Practicum Project

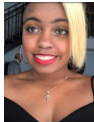
Last spring, practicum students developed a predictive model of production time for a manufacturer of corrugated boxes and conducted an in-depth analysis of unstructured text and call volumes for a company working in the internet of things. Perhaps your organization has a question but lacks time to analyze the data to answer the question. As a Practicum Sponsor, your organization identifies a problem/question and provides 1) a brief description of the problem or question to address; (2) a general description of the size and nature of the data set to be analyzed; (3) The contact information for key supporters within the organization. There are no direct fees for sponsoring a practicum project.

We realize that sponsoring an educational project for students requires a time commitment. Our students and faculty are grateful for the opportunity to partner with your organization. If you are interested in supporting a project, please contact Dr. Allison Jones-Farmer, Van Andel Professor of Business Analytics, farmerl2@miamioh.edu, (513) 529-4823 by October 25, 2019, for more info.

What's in Store for 19/20

- With the University financial projections tightening, we will be back to being very reliant on external funds for success. I will be nurturing all of our key relationships for support and working hard to seek new partners.
- Continue to invest in faculty development opportunities that help us to stay current as a group in IS and Analytics technologies and methodologies.
- We will be hiring two more solid individuals to join our team.
- We have 10 new courses to develop to deliver the MSBA starting with the Prereq Certificate next summer.
- Market and recruit the first cohort and line up experiential projects for the MSBA.

Dawley



Tilar Saunders



Scott Ballitch

KPMG



Jingrong Chen



Quaid DeLacluyse



Luke Moresea

Worldpay



Morganne Turk



Haoyu Wang

ISA Double Barrel



Cameron Devitt



Evan Jones



Michael Kittel



Yixuan Zhao

EY



Sicun Chen



Cameron Devitt



Austin Jackson



Kara Leckinger



Shrey Soni

ISA Advisory Board



Eden Eisel



Mitchell Fairweather



Eric Grosskopf



Alexander Kenkel



Sam Milner



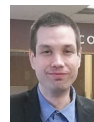
Jane Moore



Jessica Mullendore



Donna Nguyen



Kevin Steinmetz



Elizabeth Test



Ben Wachtel



Charlotte Wallis

Continued ISA Success Relies on External Support

The projections are that it is going to get much tougher for us to fund new initiatives the way we have in the past, which was predominantly with internal funding. We absolutely need financial support from our alumni and corporate partners to continue to move the needle as we have.

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. We absolutely rely on financial support from outside the university for success and projections indicate this will be more important going forward. The most important areas where ISA could use outside gifts are:

- Faculty training on emerging tools and techniques in both IS and Analytics
- Curriculum and course development efforts
- Experiential Learning opportunities for ISA students
- Software and Hardware necessary for all of our academic ventures

Because our needs in these areas are very different from (i.e. more than) the typical Miami academic department, they tend to be woefully underfunded by the university

If you give to Miami, please consider directing your gifts specifically toward the ISA department. Below is a URL to earmark your Miami gift to ISA online. You may also click on the link on the ISA Department web page.

<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 at the top of page one. Please make the check payable to Miami University and write Information Systems & Analytics on the memo line.

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.