SEGUE: SIUE's new director for the Center of Predictive Analytics shares her story

Amanda Cooper, For the Intelligencer

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On this week's episode of Segue, Southern Illinois University Edwardsville's weekly radio program exploring the lives and work of the people on campus and beyond, Greg Budzban, PhD, College of Arts and Sciences (CAS) dean, interviews Carrie Butts-Wilmsmeyer, PhD, the new director for the Center of Predictive Analytics (C-PAN).

"I like to start off by asking our guests how they chose a path that led them to SIUE," begins Budzaban, "How did you end up getting into statistics and predictive analytics?"

"If you would have told me that I'd end up here, I would have laughed," answers Butts-Wilmsmeyer. "I started off in pre-medicine and loved the coursework, but I couldn't stand the sight of blood. Some of the pre-med courses were in my university's college of agriculture, and that's how I was introduced to statistics classes.

"What was most interesting to me was a field of plant breeding using statistical genetics that relied on predictive analytics to forecast how plants would perform. That's where I began my journey in the agricultural field of plant breeding."

After graduating with her bachelor's degree from the University of Kentucky at Lexington, Butts-Wilmsmeyer enrolled as a graduate student at the University of Illinois at Urbana-Champaign, where she ended up working with data in their Department of Crop Sciences. While finishing her doctoral degree, she was offered a position to teach data analytics courses in the form of biometry.

"Not only was I teaching those courses, but I was acting as a data consultant for the department," explains Butts-Wilmsmeyer. "At any given day, I was dealing with things from educational psychology to environmental quality, while continuing to breed plants."

"I've also been involved in predictive analytics and statistics for most of my professional career," says Budzban. "When I became dean of CAS, one of the things I wanted to do was start a research center in this area, and the Chancellor's Innovation Fund gave me an opportunity to write a grant and fund that idea. Your background is exactly what we were looking for in a director, and we're pleased that you're here on campus helping us start the center."

"Thank you! I've interacted with the faculty over the last few months, and there is already excitement about how we can take data and turn it into something meaningful and impactful to improve student success or lead to

greater community impacts," says Butts-Wilmsmeyer. "Being part of something like this is something I couldn't pass up."

During the last few months, Butts-Wilmsmeyer has been working on many things to ensure C-PAN's success. Along with developing a marketing strategy for the center, she has met with both faculty and community partners to assess the resources they'll need in telling the stories of many different datasets.

"Oftentimes people have the computational tools to analyze the data, but need to craft an analysis for a particular problem," notes Budzban. "Every single problem and dataset has its own idiosyncrasies, meaning data analytics is not a one-size-fits-all industry."

"This has led to what I call a data consulting firm model," says Butts-Wilmsmeyer. "People can come to us, and we can develop creative solutions to those problems. For instance, it could be anything from figuring out how to visualize data in a way that is a little bit easier to understand, to developing a very sophisticated data analysis pipeline to mine through and interpret very complex data.

"C-PAN's mission is to ultimately foster multidisciplinary and multi-institutional collaborations that seek out both external funding, as well as internal funding to support researchers in their pursuit of analyzing data in an ethical manner."

To help train the next generation of data scientists, C-PAN will focus on the following six different areas: research support for faculty and community stakeholders, partnering with industry members to help analyze datasets, workforce training, community engagement, student success, and faculty development.

To learn more or become involved in the developing research center, contact Butts-Wilmsmeyer at cbuttsw@siue.edu.

Tune in to WSIE 88.7 The Sound to hear the entire conversation.

More Information

TUNE IN:

When: 9 a.m. Sunday, Dec. 8

Radio: WSIE 88.7 FM

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