

SIUE's Center for Predictive Analytics Introduces Data Science Internship Program

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EDWARDSVILLE – Real-world applications are essential to college student development, specifically for those pursuing data sciences. Southern Illinois University Edwardsville's Center for Predictive Analytics' (C-PAN) Data Science Internship (DSI)

Program is providing students with the opportunity to gain applied experience in data analysis to prepare for their future careers while aiding the local region with affordable and novel data solutions.

C-PAN was founded in 2019 to support the growing need for big data and machine learning solutions on the SIUE campus and surrounding area. By assisting campus researchers and local industries, C-PAN provides innovative data analysis solutions and real-world training opportunities to the next generation of data scientists.

C-PAN is currently recruiting graduate and undergraduate student interns to provide data analysis skills for a variety of projects. Student interns at the undergraduate level gain exposure to real-world datasets while receiving hands-on training they can utilize in their future careers. Graduate student interns work on data science projects while serving as project managers and coordinating teams of undergraduate students.

"What we are finding with training students in data science is that coursework is invaluable and has its rightful place, but students also need hands-on training in order to develop the data skills they'll need in the workplace," said C-PAN Director Carolyn Butts-Wilmsmeyer, PhD. "The DSI Program will help students develop those important job skills before they graduate."

Within the DSI Program, interns can expect to conduct data analysis, compile data, help researchers find and evaluate data analysis tools, help others understand their analysis, and troubleshoot coding errors in R, SAS, Python, Excel, and Business Intelligence software.

Geography major Courtney Flach, of Montrose, is C-PAN's inaugural DSI graduate student. Flach applies her background in math, computer science, and geography to solve complex data problems while mentoring undergraduate students.

"Through C-PAN, I have had the opportunity to work with several different types of data, been exposed to different methods, and gained experience interpreting data and reporting it in a way that others can understand," said Flach. "These are valuable skills in preparing for a future career that I would have not otherwise gained."

Flach has contributed to numerous C-PAN projects, including leading "An Analysis of Housing in St. Louis by Race, Income, and Parcel Vacancy Rates." She is currently managing C-PAN's Data Science Help Desk while working on risk assessment, weather, and geospatial models.

"Since the program's establishment, many students have become involved, which is wonderful to see," added Flach. "Each student plays an integral role that is geared

towards their interests. The housing project involved geospatial analysis, which is directly in line with the type of work I want to pursue. Having the opportunity to build on my skills in this field is extremely beneficial."

Flach aspires to work in the geography field, preferably GIS or weather-related, where she can continue to work with and mine data.

"As every discipline becomes progressively more data-driven in this digital world, a lot of brilliant researchers are finding themselves in a position where they have collected an amazing dataset but need to use statistical and data science resources in order to analyze their data," added Butts-Wilmsmeyer. "The DSI Program helps to provide a resource to researchers both on campus and at nearby industries, while providing interns the chance to gain data science and statistical analysis experience under the guidance of a faculty member."

Students interested in C-PAN's DSI program can contact Butts-Wilmsmeyer at cbuttsw@siue.edu or 618-650-2682. To meet C-PAN's current DSI students, visit siue. edu/cpan/about/who-we-are .

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