Math Department wins NSF Data Science Corps Grant

The grant provides funding for internships for math majors interested in Data Science as well as the creation of a machine learning course.

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Professor Bob Pelayo, who's worked to lift up the instruction efforts of the UCI Department of Mathematics, is part of the team that won the new grant. "I knew early on when I was in college that teaching excited me," Pelayo once said in an interview. "When I was a sophomore serving as a TA in math courses as an undergraduate, it sparked in me a passion like nothing else."

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Laurel Hungerford

UCI Department of Mathematics Associate Professor of Teaching Bob Pelayo, alongside Professor Babak Shahbaba of UCI Statistics & Computer Science, just won a $1.5 million grant from the Data Science Corps of the National Science Foundation to expand the university's Data Science undergraduate curricula. The proposal — spearheaded by Shahbaba — creates support for the creation of paid internships for first and second-year mathematics majors interested in following UCI's Data Science concentration in Mathematics. The internships will give budding students a chance to engage with data science practices like data visualization with professors like UCI's Dr. Mine Dogucu, Assistant Professor of Teaching in Statistics. The grant also provides funding for professors like Pelayo, who's worked to make taking math classes at UCI a more inclusive experience for students, to create a new upper-division Mathematical Machine Learning course that, Pelayo explained, "will fill a critical need for machine learning training for Data Science concentration students in Math and within the School of Physical Sciences." The grant will also foster collaborations between disparate sectors of UCI, as well as other institutions, including Orange County's California State University Fullerton as well as Cypress College. Pelayo already has a program running in collaboration with CSU Fullerton called BioCalc PEA — a $1.4-million-dollar initiative that aims to help instructors merge concepts from math and biology — and, as a result of this new grant, "this is one of our first meaningful partnerships with the local community college, Cypress College," he said. "It will provide opportunities for students to work with industry partners and gain meaningful data science skillsets that employers want. Math majors have been requesting this for years, and this grant helps us get closer to achieving this."

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