UC SANTA BARBARA

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# Teaming for Technology

To advance knowledge in critical next-generation technologies, Amazon has made a substantial gift to UC Santa Barbara. The investment will support graduate student researchers in computer science and in statistics and applied probability, as well as ongoing lectures series in machine learning and data science.

The gift includes underwriting one graduate student fellowship in the Department of Computer Science (CS) and four graduate fellowships in the Department of Statistics and Applied Probability (PSTAT). It also supported the second annual Responsible Machine Learning Summit recently hosted by UC Santa Barbara's Center For Responsible Machine Learning.

This new research and workforce development effort was catalyzed by Amazon's office in downtown Santa Barbara, where the Amazon team curates the expert knowledge that allows Alexa's cloud-based voice service to answer customers' questions. The company already employs more than 150 in this office and has plans to create an additional 100 jobs over the next few years.

"When Amazon acquired semantic technology company Graphiq in Santa Barbara, we knew that having UC Santa Barbara in our backyard was going to help us access world-class talent and cutting-edge faculty research," said Bill Barton, vice president of Alexa Knowledge. "Our need for exceptional knowledge engineers and data scientists continues to be critical and now that we've invested in a new Santa Barbara research office, the time is right for us to further our relationship with the university and its faculty."

As part of this collaboration, Amazon will also support an on-campus speaker series featuring data science experts from both academia and the private sector. This comes as UC Santa Barbara rolls out its Data Science Initiative (datascience.ucsb.edu), aiming to push the envelope in data science research and to equip graduates with foundational computer science and statistics skills.

Central to that initiative is the work of UC Santa Barbara's Natural Language Processing (NLP) group, led by William Wang, a professor of computer science. NLP graduate students will be directly supported by Amazon's gift.

"I am so grateful that Amazon is teaming up with UCSB's Natural Language Processing group, which ranks among the top 5 in the U.S. in the area of NLP from 2018-2020, according to CSRankings.org," Wang said. "We are excited to be supported by Amazon to tackle some of the hardest problems in knowledge graphs, information extraction and dialog systems."

"We are also glad that Amazon is investing in our new UCSB Center for Responsible Machine Learning (CRML), and together we will invite the world's leading experts in responsible AI for the CRML Distinguished Lectures," he continued. "Responsible AI is a new interdisciplinary area, including privacy, fairness, transparency and energy efficiency. We are very much looking forward to advancing the state-of-the-art technologies in these areas, and creating critical mass with Amazon to make Santa Barbara a regional hub that attracts top talents in AI."

The investment by Amazon similarly supports graduate students in statistics and applied probability (PSTAT), under the leadership of Michael Ludkovski, professor and department chair.  Within PSTAT, the Amazon gift will support four Ph.D. students, each in various stages of their training.

"The Amazon funds are enabling our students to concentrate on their projects as they wrap up their dissertations, as well as to enhance the recruitment package for an incoming PhD student," said Ludkovski. "All the projects are in the areas of applied machine learning and connect to Amazon initiatives for computational and data-enabled science."  Amazon also will continue to support the Distinguished Lecture Series in Data Science, which brings data science thought leaders to campus for public lectures.

Joe Incandela, UC Santa Barbara's Vice Chancellor For Research, notes, "We are delighted that Amazon has invested in downtown Santa Barbara and in students and

faculty research on campus. Collaboration is part of the university’s DNA, so we’re all looking forward to working with Amazon’s engineers and scientists right here in Santa Barbara.”

To learn more about Amazon’s approach to science and research please visit amazon.science

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## About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.