

THE NEWS

DEPARTMENT OF COMPUTER SCIENCE

SPRING
2019



INTERNET HALL OF FAMER CRAIG PARTRIDGE NAMED NEW CHAIR OF COMPUTER SCIENCE DEPARTMENT

Story by Katie Courage

Have you given much thought to the domain name in your email address? Gmail, colostate or earthlink? Well Craig Partridge has. In fact, he is the one who designed how emails would be routed through these domains. He is also the one we can thank for high-speed, multi-gigabit routers coming on the scene in the 1990s.

And starting this summer, he will be leading the Department of Computer Science in Colorado State University's College of Natural Sciences.

"I am looking forward to coming to Colorado State," Partridge said. "Computer science skills will be essential in tomorrow's workplace, and we want all of our graduates to have those skills."

As the department's new chair, Partridge hopes to expand partnerships with local businesses and government agencies, as well as improve access, teaching capacity and diversity in the field.

Internet famous

Partridge has spent the past 35 years working for Raytheon BBN Technologies, most recently as chief scientist for networking research. There, he oversaw 70 researchers working on projects primarily funded by the U.S. Department of Defense.

Partridge received his A.B. in history and his M.Sc. and Ph.D. in computer science from Harvard University. He is a member of the National Science Foundation's Computer, Information Science and Engineering Advisory Committee; a member of the National Academy of Sciences' Computer Science and Telecommunications Board for the National Research Council; and served as chair of the Association for Computing Machinery's Special Interest Group on Data Communications.

[Read more in SOURCE](#)



COLLEGE OF
NATURAL SCIENCES
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DISCOVERY BEGINS HERE

Message from the Chair



It was a busy fall here in Computer Science. We have 750 majors and over 150 graduate students. Our building is packed most days with students studying, and faculty are hard at work teaching, researching, and preparing new courses. We welcomed our new Assistant Professor Francisco Ortega, whose research on human computer interaction in virtual and augmented reality

opens exciting opportunities for us. This year we are teaching our first data science course for the college's new data science major, and our new blockchain course set a record for enrollment for a first-time course in computer science.

This summer the State of Colorado gave CSU five years of funding to expand education in cybersecurity. We joined forces with the Department of Computer Information Systems to use this funding to establish the Colorado Cyber Security Center. The Center's new leadership team is working to expand our cybersecurity course offerings both on campus and online. They are also working to get our program certified by the Department of Homeland Security and the National Security Agency.

Our students and faculty earned recognition last fall. Ph.D. graduate Matt Malensek, now assistant professor at the University of San Francisco, won the IEEE Technical Committee on Scalable Computing Outstanding Ph.D. Dissertation Award.

Graduate student Hajar Homayouni was awarded the Western Association of Graduate Schools/ProQuest Distinguished Master's Thesis in STEM. Our team of undergraduates won the National Society of Black Engineers hackathon. Another undergraduate team, competing against an all-graduate-student field, took first place in the poster competition at the Rocky Mountain Advanced Computing Consortium's annual event. Finally, two of our undergraduates teamed up to win CSU's Celebrate Undergraduate Research and Creativity Showcase, competing against 500 other entries. We also had record shattering attendance at the Rocky Mountain Celebration of Women in Computing and the Grace Hopper Celebration. It is our honor to teach these great students. You can read more about these accomplishments and others in this newsletter and on our website.

There is substantial demand for students with computing expertise, both in Colorado and the nation. Sixty percent of our department's graduates stay in Colorado and work in our fast growing, high tech industries. To keep up with this demand, our department will have to at least double in size over the next several years. That growth will require support and investment from both inside and outside the University. We welcome your participation in building the bright future in store for us!

A handwritten signature in black ink, appearing to read "Craig Partridge".

Craig Partridge
Chair, Department of Computer Science

Department Highlights

First data science major in the region launched by CSU



Our world now depends on big data – and the thoughtful analysis of it. From health care to finance to government to science, we rely every day on the study of truly massive troves of data. To help the state and the world meet the ever-increasing need for data experts, and to help shape the data-driven future, Colorado State University launched a new major in data science in fall 2018. The interdisciplinary program is the first of its kind in the entire Rocky Mountain region.

Read more on [SOURCE](#).

New Colorado law allocates \$1.2 million to bolster CSU cybersecurity education



A new Colorado law intended to strengthen data privacy measures for both businesses and government includes funding for Colorado State University to enhance its cybersecurity education initiatives. A \$1.2 million appropriation in the new law, titled "Cyber Coding Cryptology for State Records," will go to CSU's efforts to train students and the workforce in modern cybersecurity practices and procedures. The bill includes more than \$5 million in such appropriations to several Colorado institutions of higher education.

Read more on [SOURCE](#).

Sangmi Pallickara awarded inaugural Dr. Jack Cochran Family Professorship



Earlier this year, [Dr. Jack Cochran](#) (biological science, '68) provided a significant gift to establish the Dr. Jack Cochran Family Professorship in the Natural Sciences at Colorado State University. It is the first College of Natural Sciences Professorship, and the first time it has been awarded. The Professorship is given to a member of the college

faculty who has demonstrated knowledge, experience, and a strong scholarly record in the life sciences or STEM disciplines. The holder of the Professorship receives significant funding for salary, student, and other support for their work for three years.

Read more on [SOURCE](#).

Shrideep Pallickara receives CSU Online Innovative Educator Award



In recognition of his commitment to excellence in online education, Professor Shrideep Pallickara was recently honored with a CSU Online Innovative Educator Award. Pallickara is a Monfort Professor and is also a recipient of the University's Board of Governors Award for Excellence in Undergraduate Teaching. Student Joshua O'Dell, who

nominated Pallickara for the award, explained that Pallickara had a major impact on his educational experience as an online student. O'Dell noted that, in addition to providing text-based materials, Pallickara delivered lectures for all of the online course content, which helped create a much more engaging learning experience.

Read more on [SOURCE](#).

Supporting Diversity & Inclusion

Joining In: computer science student participation up fivefold at women in computing conference



Is majoring in computer science worth it? How is my classwork used in the real world? What are my career options in this field? Where do I find mentoring and support? I feel alone – is there anyone out there like me?

Students can explore those questions and more at the Rocky Mountain Celebration of Women in Computing (RMCWiC). In November, 30 women students from the Department of Computer Science grabbed the valuable opportunity to attend the biennial conference in Lakewood, CO – five times the participation of just two years ago. Funded by scholarships from the conference, industry, and an anonymous donor, the students joined 200 others at the 2-day event aimed at encouraging the career interests of local women in computing.

Read more on [SOURCE](#).

Forward Together: Women computer science students inspired, recruited at Grace Hopper



This fall, 12 women computer science students from Colorado State University received scholarships to join 22,000 participants at the world's largest gathering of women technologists. Accompanied by computer science faculty Indrakshi Ray and Ross Beveridge, the students traveled to Houston and immersed themselves in the three-day conference featuring career fairs, interviews, networking events and talks from notable women in STEM.

Read more on [SOURCE](#).

Department adopts braid initiative



The Department of Computer Science at Colorado State University is honored to be accepted as a 2019 BRAID Affiliate.

The Building, Recruiting, And Inclusion for Diversity (BRAID) initiative, co-led by AnitaB.org and Harvey Mudd College, provides support to computer science (CS) departments to help increase the percentage of women and underrepresented minority students in their undergraduate computing programs. Participants implement successful, tested strategies developed at BRAID Beacon Schools — institutions leading the way in gender diversity within their CS departments.

Read more on [SOURCE](#).

New Faculty & Staff



Francisco Ortega

Assistant professor Francisco Ortega's research focuses on improving user interaction by eliciting (hand and full-body) gesture sets by user elicitation, developing interactive gesture-recognition algorithms, and multimodal user interaction for virtual and augmented reality. He is also working on how to increase interest in computer science for non-CS, entry-level college students. He was previously a visiting assistant professor at Florida International University where he also received his Ph.D. in the field of Human-Computer Interaction (HCI) and 3D User Interfaces (3DUI).



Kristina Brown

Academic Success
Coordinator



Elisa Cundiff

Academic Success
Coordinator



Phil Sharp

CS 110 Instructor



Heather Wolfe

Accounting Technician

Support the Department

Your support of the department is incredibly valuable. Please consider making a difference to today's students, faculty, facilities, and programs at whatever level is right for you. Thank you!

For more information on giving, please contact Simone Clasen, Associate Vice President of Philanthropic Operations.

College of Natural Sciences
1801 Campus Delivery
Fort Collins, CO 80523-1801
Phone: (970) 491-0997 | Mobile: (970) 214-9938
simone.clasen@colostate.edu
www.natsci.colostate.edu

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