

Selected Recent Accomplishments of Computing-Related Faculty and Students

April 2024

Student, Faculty, and Alumni Honors

- Computer Science PhD student Nataliya Nechyporenko received a prestigious Apple Scholars in AIML Ph.D. fellowship for work on embodied machine learning.
- Information Science PhD student Tajanae Harris received a prestigious internship at Microsoft Research with Macarthur winner Mary Gray for research on community data infrastructures to fight for environmental justice in a historically marginalized area.
- Information Science PhD student Shamika Klassen received the Alice Cleora Reeves Dissertation Award from the CU Boulder Center for African and African American Studies.
- Computer Science PhD student William Xie has been selected to receive a prestigious National Science Foundation Graduate Fellowship.
- Graduating Computer Science PhD student Christine Chang has been selected as a 2024-25 IEEE Congressional Fellow.
- Computer Science PhD student Aaquib Tabrez won the People's Choice award for the campus graduate school's Three Minute Thesis competition.
- Computer Science and BioFrontiers professor Aaron Clauset received the engineering college's annual Dean's Award for Research.
- Computer Science teaching professor Divya Vernerey is one of the three 2024 recipients of the campus' Outstanding Mentor Award for Faculty Mentoring.
- Computer Science alumni Denzil Ekow Bilson (BS 2023) and Avinash Ratnavel (MS 2018) are 2024 recipients of the college of engineering Alumni Engagement Medal.

Research Impact and Awards

- Computer Science professor Sangtae Ha and colleagues have standardized the CUBIC TCP specification, which ensures that each internet connection receives the appropriate data rate while preventing traffic congestion on the network. To date, CUBIC has been adopted as the default TCP congestion control algorithm in the Linux, Windows, and Apple stacks.
- Computer Science professor Majid Zamani and collaborators received the IEEE Controls Systems Society George S. Axelby Outstanding Paper Award for their paper "A Lyapunov-based small-gain theorem for infinite networks."
- Computer Science professor Danna Gurari and collaborators received a "Best in Physics" award for their abstract "Computer Vision Assisted Alignment for Stereotactic Body Radiation Therapy (SBRT)" from the American Association of Physics in Medicine.
- ATLAS / Computer Science professors Ellen Do and Michael Rivera, along with student Sandra Bae and collaborator Danielle Szafir, received a best paper honorable mention at IEEE Transactions on Visualization and Computer Graphics 2023 for the paper: "A computational design pipeline to fabricate sensing network physicalizations."
- Computer Science professors Brad Hayes and Alessandro Roncone and their students Yi-Shiuan Tung and Matthew Luebbers received a best paper nomination at Human-Robot Interaction 2024 for their paper "Workspace Optimization Techniques to Improve Prediction of Human Motion During Human-Robot Collaboration."
- The paper "Bio-Digital Calendar: Attuning to Nonhuman Temporalities for Multispecies Understanding" led by ATLAS / Computer Science professor Mirela Alistar received the Best Pictorial Award at the ACM Conference: Tangible, Embedded, and Embodied Interaction.

Research Funding

- Computer Science professor Dan Larremore’s research group is part of a 5-year, \$27.5M project “Center for Implementation in Outbreak Analytics and Disease Modeling: Multi-Scale Outbreak Decision-Support Tools” that involves universities, municipal and state governments, public health partners, and industry.
- Computer Science professor Ryan Layer led a team of about 30 in submitting the largest non-NASA proposal ever submitted by CU, \$124M to ARPA-H for the project “Improving Health Outcomes with AI-Driven Patient-Matched In-Silico Trials.”

Education

- The computer science BS degree received a full six-year ABET accreditation!
- The Data Science and Computer Science Coursera MS programs both passed enrollment milestones in the first 8-week session of 2024, with over 2000 and 1000 course enrollments, respectively. The programs are about 2.5 and 0.5 years old, respectively.
- Computer Science professor Tom Yeh’s Coursera course on generative AI was named one of “The Best Generative AI Courses Money Can Buy” by Forbes magazine.
- Computer Science teaching professor Ami Gates has created a capstone projects course for the data science masters’ program and numerous new industry relationships.

Entrepreneurship

- The startup company [QuivAR](#) of Computer Science Scholar-in-Residence Levi Perigo debuted an innovative app for the archery community, integrating LiDAR, AI, and AR technologies at the premier archery trade show, and won Technology of the Year.
- Computer Science professor Daniel Acuña won and received \$120K from the CU Lab Venture Challenge for ReviewerZero.ai, a system for detecting potential scientific falsification in manuscripts, and will continue towards commercialization.
- Computer Science professor Chris Heckman is spending this academic year working with Zoox, the self-driving car subsidiary of Amazon, to lead its efforts on generative AI applied to autonomy.

Professional Service

- Computer science professors Brad Hayes and Alessandro Roncone helped organize the Human-Robot Interaction Conference 2024, held in Boulder and attend by over 800 people.
- Computer Science professor Sriram Sankaranarayanan co-organized an NSF-sponsored workshop on rigorous and reproducible scientific reasoning at CU Boulder in Nov. 2023.
- ECEE professor Tamara Lehman received the 2024 Rising Star Service Award from the IEEE Computer Society Technical & Conference Activities Board.
- Computer Science professor Liz Bradley served as the interim director of the influential Computing Community Consortium for Sept-Dec 2023.

Philanthropy

- Longtime Boulder residents Dick and Jane Stebbins have established an endowed professorship in Computer Science to enhance the University of Colorado’s global competitiveness, with a focus on artificial intelligence.

