

Introducing Our New Faculty

This year marks the golden anniversary for the Donald Bren School of Information and Computer Sciences (ICS). Founded in 1968 as a department at UC Irvine, ICS continues on a path of unprecedented growth 50 years later.

As of fall 2018, undergraduate enrollment nears 3,500 students, more than doubling in five years. Our computer science major has become the third largest program on campus, and our data science major continues to be our fastest-growing program in the school with now more than 100 students. Graduate enrollment exceeds 600 students, with about 300 students pursuing a doctoral degree, and more than 150 new students each year enrolling in our professional programs in computer science and human-computer interaction and design. Despite their rapid growth, our programs are more selective than ever and continue attracting exceptional students, with three of them receiving National Science Foundation Graduate Fellowships and several others recognized with national awards in academic year 2017-18.

Mirroring student growth, our faculty has grown to record levels, with the number of tenured/tenure-track faculty and lecturers in the school surpassing 100 this fall. In recent years, faculty hiring has emphasized the broader space of data science, leveraging the school's traditional strengths in the area of machine learning. We have also invested in the space of digital learning, advancing a new area of excellence for our school.

I am pleased to introduce the new faculty joining ICS this year. Advancing the school's strategic priorities in the areas of big data, security, human-computer interaction, and digital media and learning, these outstanding researchers and educators will be instrumental in moving ICS forward, as it continues to lead the exploration of computing technologies and the ways in which they revolutionize the world around us.

Heading into 2019, ICS will continue to recruit exceptional candidates for multiple faculty positions in the departments of Computer Science, Informatics, and Statistics. For more information on ICS faculty recruiting, visit bit.ly/ICSFacultyRecruiting.

Marios C. Papaefthymiou
Professor of Computer Science
Ted and Janice Smith Family Foundation Dean



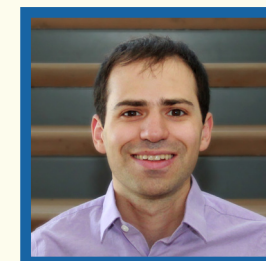
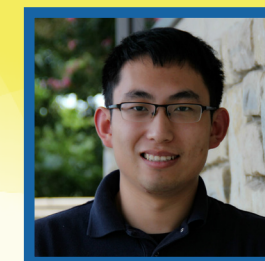
UCI Donald Bren School of
Information & Computer Sciences
6210 Donald Bren Hall
Irvine, California 92697-3425

NONPROFIT ORG.
U.S. POSTAGE
PAID
Santa Ana, CA
Permit No. 1106



UCI Donald Bren School of
Information & Computer Sciences

New Faculty 2018

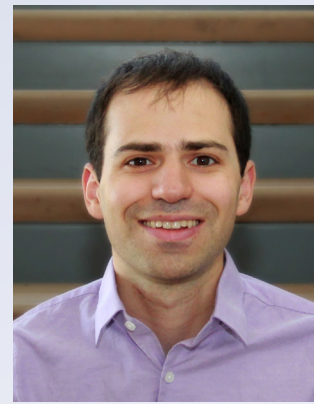




Iftexhar Ahmed

Assistant Professor, Informatics
Ph.D., Computer Science, Oregon State University

Ahmed's research focus is on software engineering. In particular, he is exploring how to combine software testing, static analysis and machine learning to create better tools and techniques for improving software quality under real-world conditions. He has used static code analysis and mining project repositories to identify factors related to source code and develop processes that affect the quality of the software measured in terms of bugs and design issues. He is also examining the effectiveness of mutation testing in automatically uncovering bugs in complex real-world systems. He joined the ICS faculty in September 2018.



Daniel Epstein

Assistant Professor, Informatics
Ph.D., Computer Science and Engineering, University of Washington

Epstein focuses on personal informatics, studying how personal tracking technology can acknowledge and account for the realities of everyday life. His research draws on theories and techniques from human-computer interaction, particularly from ubiquitous computing, social computing and persuasive technology. Using human-centered design methods, Epstein works to understand people's needs through interviews and surveys, designing and evaluating different options through online studies. He then implements and deploys novel systems aimed at better supporting people's tracking needs. He joined the ICS faculty in September 2018.



Stephan Mandt

Assistant Professor, Computer Science
Ph.D., Theoretical Physics, University of Cologne

Mandt was a senior research scientist and head of the Statistical Machine Learning Group at Disney Research, LA. Previously, he was a PCCM Postdoctoral Fellow at Princeton University, a postdoctoral researcher with David Blei at Columbia University, and a Ph.D. fellow of the German National Merit Scholarship Foundation. Mandt has three patents pending; over 14 publications with conferences such as NIPS, ICML and CVPR; and nine articles in journals such as the *Journal of Machine Learning Research* and *Physical Review Letters*. His interests include scalable probabilistic modeling, Bayesian deep learning, variational inference, and applications in the sciences and digital media. He will join the ICS faculty in October 2018.

Stacy Branham

Assistant Professor, Informatics
Ph.D., Human-Computer Interaction, Virginia Tech

Branham's research sits at the intersection of human-computer interaction and accessible computing, exploring how technologies mediate collocated interpersonal relationships and can inadvertently disempower marginalized people. Her recent investigations reveal technological threats to safety and well-being as people with vision impairments navigate public spaces, people with disabilities encounter law enforcement, blind parents care for their children, and transgender people encounter gender-recognition algorithms intended to assist blind people. She advocates technology designs that emphasize the interdependence and social integration of all people. She joined the ICS faculty in September 2018.



Sergio Gago Masague

Assistant Professor of Teaching, Computer Science
Ph.D., Product Engineering, Universitat Politècnica de Catalunya

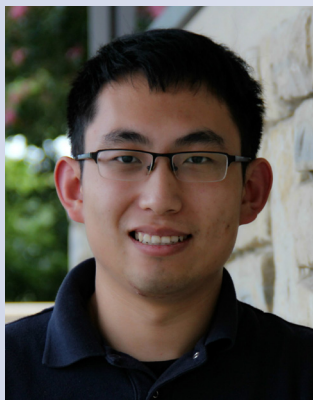
Gago Masague conducts cross-disciplinary research in assistive and educational technologies, mentoring students in research areas such as product and systems engineering, human-computer interaction, design and prototyping, data visualization, intelligent user interfaces, computer games and medical informatics. He worked as a research scientist in UCI's California Institute for Telecommunications and Information Technology and serves as director of the Engaging Technology and Application Design Lab. Gago Masague was an informatics lecturer at UCI before joining the computer science faculty as an assistant professor of teaching in September 2018.



Kylie Pepler

Associate Professor, Informatics and School of Education
Ph.D., Education, UCLA

An artist by training, Pepler utilizes design-based research methods to reconceptualize learning environments, particularly at the intersection of the maker culture, systems thinking and new computational technologies. She studies the creative uses of computer programming among youth communities and focuses on the design and study of e-textile artifacts. This work has resulted in numerous publications, including a four-book curriculum through MIT Press. Pepler was an associate professor of learning sciences and director of the Creativity Labs at Indiana University prior to joining the ICS faculty in September 2018.



Qi Alfred Chen

Assistant Professor, Computer Science
Ph.D., Computer Science and Engineering, University of Michigan

Chen's research is on network and systems security, addressing security challenges through systematic problem analysis and mitigation. His research has discovered and mitigated security problems in systems such as next-generation transportation systems, smartphone OSes, network protocols, DNS, GUI systems and access control systems. Currently, his focus has been on smart systems and IoT, including transportation and autonomous vehicle systems. Chen's work has high impact in both academia and industry with over 10 top-tier conference papers, a DHS US-CERT alert, multiple common vulnerabilities and exposures, and over 50 news articles by major technology news media. He joined the ICS faculty in July 2018.



Joshua Garcia

Assistant Professor, Informatics
Ph.D., Computer Science, USC

Garcia's research interests are in software engineering with a focus on security, analysis and testing, architecture, and maintenance and re-engineering. He leverages static and dynamic analysis techniques, machine learning and artificial intelligence to address problems related to mobile applications and software architectural decay. Garcia re-engineers software, making it easier to add new features, fix bugs, identify vulnerabilities and determine if those vulnerabilities are exploitable. He is also working to automatically repair exploitable vulnerabilities, particularly in Android apps and IoT systems. He joined the ICS faculty in July 2018.



Jennifer Wong-Ma

Associate Professor of Teaching, Computer Science
Ph.D., Computer Science, UCLA

Wong-Ma's research interests are in architecture, wireless and distributed embedded systems, hardware intellectual property protection, and statistical optimization. Before coming to UCI, she was a teaching faculty member in the Computer Science Department at Stony Brook University, where she also served as an undergraduate program advisor and coordinator for the five-year joint BS/MS computer science program. While at Stony Brook, Wong-Ma received the CS Department Award for Undergraduate Education and the Award for Major Contributions to Undergraduate Education, showing her devotion to teaching sophomore- and junior-level systems and architecture courses. She joined the ICS faculty in September 2018.

Roderic Crooks

Assistant Professor, Informatics
Ph.D., Information Studies, UCLA

Crooks studies information and media technology use in minoritized communities through field-based methods, often in the context of public schools. He has explored the application of data science to the complex and politically charged realm of urban education. Examining how data aggregation, analysis and visualization are spaces of subjectivity and interpretation, he highlights the ways in which the choices data scientists make can influence course curricula and resource allocation. He is also interested in social discovery apps, community archives and digital humanities. He joined the ICS faculty in January 2018.



Sang-Woo Jun

Assistant Professor, Computer Science
Ph.D., Electrical Engineering and Computer Science, MIT

Jun's research interests include systems and software for big data analytics, aiming to boost performance and lower costs using field-programmable gate array (FPGA)-based application-specific hardware acceleration and non-volatile memory (NVM) storage. He focuses on many applications, including graph analytics and bioinformatics. Jun also served as a software developer for interactive entertainment software company Nexon Inc. and had an internship at Oracle's Big Data Discovery. He joined the ICS faculty in September 2018.



Hadar Ziv

Associate Professor of Teaching, Informatics
Ph.D., Information and Computer Sciences, UC Irvine

Ziv earned his Ph.D. from ICS, using Bayesian networks to model software uncertainties. His principle that uncertainty is inherent and inevitable in software engineering, dubbed Ziv's Law, influenced thought leaders in Agile and SCRUM methodologies. He is a mentor of Agile methods and host of the popular gathering at UCI, Agile Open. Ziv teaches regular and software-project courses, including the Informatics Capstone, empowering students to tackle real-world problems. Having been at UCI for more than 30 years, including his years as a student, he became an associate professor of teaching in June 2018.

