**FACULTY SPOTLIGHT**

University of California, Riverside researchers are among a group of 77 scientists worldwide who have sequenced the complete genome of barley, a key ingredient in beer and single malt Scotch. The research, 10 years in the making, is the cover article of the journal *Nature*. The sequencing and assembly was a daunting task, as the barley genome is almost twice the size of the human genome, with a number of characteristics that complicate sequencing. Prof. Stefano Lonardi and Dr. Rachid Ounit from Computer Science and Engineering, and Prof. Tim Close, Dr. María Muñoz-Amatriain, and Steve Wanamaker from Botany and Plant Sciences developed novel algorithmic strategies to assemble the gene bearing portion of the barley genome.

![Faculty Spotlight Image](image1)

**FACULTY AWARDS**

- **Nael Abu-Ghazaleh**
  - Best Paper Award at IEEE International Conference on Network Protocols
- **Laxmi Bhuyan**
  - IEEE Life Fellow
- **Zizhong "Jeffrey" Chen**
  - Outstanding Engineering Achievement Merit Award
- **Eamonn Keogh**
  - $1.9M NSF NRT - Graduate training program in computational entomology
- **Stefano Lonardi**
  - ACM Distinguished Scientist, IEEE Fellow, Cover feature on Nature, BCOE Teaching Award Honorable Mention
- **Zhiyun Qian**
  - NSF CAREER award
- **Frank Vahid**
  - UCR's 2016 Innovative Teaching Award - UCR Academy of Distinguished Teachers

**STUDENT SPOTLIGHT**

PhD student, Yan Zhu, was featured in an ongoing TV ad campaign for Microsoft Research (MSR). She was recruited to intern at MSR in 2016 because of her unique expertise in using machine learning to classify insects. The one minute spot is available on youtube. Yan's work has been reported in several entomological conferences, and in an upcoming submission to Nature Robotics. Yan is a member of Prof. Eamonn Keogh's Lab.

![Student Spotlight Image](image2)

**RECENT CSE PHD ALUMNUS' COMPANY FEATURED IN THE NEWS**

Rachid Ounit is the CTO of Biota, a startup that was recently featured on GenomeWeb. Biota is aiming to help hospitals cut down on infections by providing them with a DNA sequencing-based microbial surveillance service and targeted interventions. Biota leverages proprietary metagenomics analysis software based on Rachid’s PhD work which was completed under the supervision of Prof. Stefano Lonardi.
Dr. Jessica Lin

Dr. Jessica Lin is an Associate Professor in the Department of Computer Science at George Mason University. She received her Ph.D. degree from University of California, Riverside in 2005, under supervision of Professor Eamonn Keogh. Her research interests focus on the mining of massive time series and spatiotemporal databases. More specifically, she has published work on anomaly detection, frequent pattern (motif) discovery, contrast set and rule mining, clustering, and visualization on time series and spatiotemporal data. Her research has been funded by the National Science Foundation (NSF), U.S. Army, Naval Research Lab (NRL), and Intel Corporation. She is an Associate Editor for the Pattern Recognition Journal and the Big Data Research Journal. Dr. Lin has served as a PC member in top-tier data mining conferences including KDD, PKDD/ECML, SDM, ICDM, and CIKM.

UC Riverside is a special place to Dr. Lin, as she spent 10 years of her life there (BS 1999, MS 2002, PhD 2005), and witnessed the tremendous growth of the campus during the 10 year period. Dr. Lin is from Taiwan, and moved to CA when she was 15. She and her family lived in Claremont, CA. After getting her PhD, she moved to VA to start her faculty appointment at George Mason University.

In her spare time, Dr. Lin enjoys running. She is currently training for her first marathon (Richmond Marathon) in November.

UCR, in collaboration with the Riverside Unified School District, has organized the UCR CS 4 All Code Camp for local high-school students. The UCR CS 4 All Code Camp was inspired by CS for All, an initiative developed by the National Science Foundation and the U.S Department of Education. It is coordinated by CSE Prof. Christian Shelton and instructed by CSE Lecturer Kelly Downey, who also developed the camp's curriculum.

The camp's program primarily focuses on hands-on programming, with the activities carefully designed to match background and interests of high-school students. Additional activities expose students to other aspects of computing, as an area of science and a profession, including presentations from CSE alumni and faculty. Through this program, students will improve their practical computer skills, become better problems solvers, and discover that coders have the power to create websites, apps and software for any field.

The CSE department plans to assess the camp's impact by tracking future career choices of its participants. Each session will train up to 40 students. The program will be offered on an annual basis, with the possibility of additional sessions during the academic year, if justified by demand. In the future, other school districts will be included.
AMR MAGDY
Amr Magdy is an Assistant Professor of Computer Science and Engineering and a co-founding faculty member of the Center for Spatial Sciences at UC Riverside. His research interests include database systems, spatial data management, big data management, large-scale data analytics, indexing, and main-memory management. His research is published in prestigious research venues, including ACM SIGMOD, ACM SIGSPATIAL, IEEE ICDE, and IEEE TKDE. Amr's Ph.D. research is recognized among best papers in IEEE ICDE 2014 and has been incubated by several industrial collaborators. His research in microblogs data management produced a successful system prototype that is patented and commercialized by a social media analytics company with access to all Twitter data. He has been selected as a finalist for Microsoft Research Ph.D. Fellowship 2014 and he was awarded a prestigious Doctoral Dissertation Fellowship from the University of Minnesota in 2015. Amr’s past research was focusing on scalable management of microblogs data, e.g., tweets, online reviews, and user comments.

SILAS RICHELSON
Silas Richelson completed his Ph.D. in mathematics from UCLA and is currently a Post-doctoral researcher with joint appointment at MIT and Boston University. His area of research is applied cryptography, computer security and complexity theory. His appointment as Assistant Professor in the Computer Science and Engineering Department starts in January 2018.