



S²ERC Showcase

Researcher/Presenter Biographies

Lawrence Chung



Lawrence Chung received his Computer Science degrees from the University of Toronto (B.Sc. 1981, M.Sc. 1984, and Ph.D. 1993). He has served the University of Toronto as a Computer Science lecturer (1993-1994), the Center for Strategic Technology Research (CSTaR), Andersen Consulting (Summer 1994), and the University of Texas, Dallas, as an Assistant Professor (1994-2000) and Associate Professor (2000 – present). His products include:

L. Chung, B. A. Nixon, E. Yu and J. Mylopoulos, *Non-functional Requirements in Software Engineering*, Kluwer Academic Publishing, 2000. 472 pp. ISBN 0-7923-8666-3. [citation count: 3,379, Google Scholar]

J. J. Kwon, J. Hong, L. Chung, "Collision detection and resolution of hazard prevention actions in safety critical systems," *Journal of Systems and Software* 118: 1-18 (2016)

L. Chung, T. Hill, O. Legunsen, Z. Sun, A. Dsouza and S. Supakkul, "A goal-oriented simulation approach for obtaining good private cloud-based system architectures," *Journal of Systems and Software*, 86(9):2242-2262 (2013)

Huseyin Ergin



Huseyin is an assistant professor of the Computer Science Department at Ball State University, Muncie, Indiana. He pursued his Ph.D. at the University of Alabama, his M.Sc. at Sabanci University - Turkey, and his BS.C. at Yeditepe University - Turkey, all in computer science degrees. His expertise areas are software engineering, model-driven engineering, and model transformation. He worked in various industries as a software developer including the R&D department at Huawei Telecommunications, the IT department at Mercedes-Benz US International, a smart shopping assistant startup called Mona, and a wedding ring manufacturing company called Benchmark. His software projects in these companies gave him an extensive look at the software development practices in various settings. He has been in the organization committee of successful local programming, scientific, and robotics competitions and camps. Lately, he is closely working with industry partners on software engineering techniques and practices. He is teaching software engineering classes and supervising software projects for local community partners, including startups, non-profits organizations, university branches, and local companies. He is also the director of Capstone Connector, which is a program under the Innovation Connector of Muncie to connect industry partners with student Capstone teams.

Tom Hill



Thomas Hill became a Partner in the Fellows Consulting Group in 2010, when he retired as the Director of Fellows and Distinguished Engineering programs after 40 years with Electronic Data Systems and HP. He has served as a Systems Engineer since becoming an Air Force computer officer in 1963. In addition to fulfilling his professional obligations, Tom is a volunteer instructor in the University of Texas at Dallas RE lab, mentors PhD students and continues to take graduate courses. He currently serves on the engineering boards of TCU and the University of Texas at Dallas. He has a 1963 TCU BS in business, a 2000 UD MBA in Information Technology, a 2014 UTD PhD in Software Engineering, Microsoft certifications and an Open Group architecture certification. Hill has written numerous articles and publications. He holds five active patents and has six patents pending.

Linghuan Hu



Linghuan Hu received a M.S. in software engineering from the University of Texas at Dallas. He is currently a Ph.D. student in software engineering at the University of Texas at Dallas under the supervision of Professor Eric Wong. His research interests include testing internet of things, combinatorial testing, symbolic execution, and test generation.

Lan Lin



Dr. Lan Lin is an Associate Professor of Computer Science. She earned her Ph.D. in Computer Science from the University of Tennessee at Knoxville. Prior to joining Ball State, she worked as a Research Scientist in the Software Quality Research Laboratory at the University of Tennessee. Her research has focused on rigorous software specification and testing methodologies, and has been generously funded by Lockheed Martin, Northrop Grumman, Rockwell Collins, Air Force Research Laboratory, and Ontario Systems (all through S²ERC), and also by NSF. Her S²ERC-funded project titled “Towards Scalable Modeling for Rigorous Software Specification and Testing” was selected to be published in the 2016 NSF Industry & University Cooperative Research Center Technological Breakthrough Compendium. Dr. Lin was appointed to be the S²ERC Director in July 2020, and served as the Program Co-Chair for the 33rd International Conference on Software Engineering and Knowledge Engineering (SEKE 2021). She recently accepted invitations to serve as the General Co-Chair for the 34th International Conference on Software Engineering and Knowledge Engineering (SEKE 2022), and to serve on a Site Visit Team to evaluate a proposed NSF Engineering Research Center (REC) Program in 2022.

Eric Wong



W. Eric Wong received his Ph.D. in Computer Science from Purdue University. He is a Full Professor and the Founding Director of Advanced Research Center for Software Testing and Quality Assurance in Computer Science at the University of Texas at Dallas. He also has an appointment as a guest researcher at the National Institute of Standards and Technology. Dr. Wong was the recipient of the 2014 IEEE Reliability Society Engineer of the Year. He is also the Edit-in-Chief of IEEE Transactions on Reliability. His research focuses on software testing, program debugging, risk analysis, safety, and reliability.

Shaoen Wu



Shaoen Wu is the State Farm Endowed Chair Professor and the Director of the Center for Cybersecurity Research and Education (C2RE) at Illinois State University. He received his PhD degree in Computer Science and Software Engineering from Auburn University. He is a senior member of IEEE, the Vice Chair for North America of IEEE MMTC 2020-2022, and a member of ACM. He worked for Ball State University 2013-2020 where he served on the Director of Security and Software Engineering Research Center (S2ERC), the Advisory Council of Scholarship for the Vice Provost for Research, the Dean's Faculty Advisory Board and the assistant department chair of computer science. He also worked as an assistant professor in the School of Computing at University of Southern Mississippi, a Staff Scientist at ADTRAN, and a Member of Technical Staff at Bell Labs, Lucent Technologies. He has published over 85 peer-reviewed papers in wireless, IoT, smart health and robotics at international journals e.g. IEEE Internet of Things Journal and conferences e.g. IEEE Globecom, ICC and ICCCN. His research has been generously supported over \$3M by NSF, NASA, AFRL, Lockheed Martin, Cisco, NVIDIA, Intel, Dell, ARM, Cypress Inc. and Microsoft. He has received three Best Paper Awards including one from IEEE GC'19, a Faculty Excellence Award, and a First Place in Graduate Student Forum. He has actively served as a Chair/Co-Chair at several international conferences and an editor for a few prestigious international journals.

Noah Ziems



Noah Ziems is an undergraduate who just finished his senior year at Ball State University. Noah has been researching Machine Learning under Dr. Shaoen Wu for 3 years. His previous research involves detecting security vulnerabilities in code using state of the art machine learning architectures. This summer he is doing research in healthcare analytics and Bayesian machine learning.