

Tingting Yu

Department of Computer Science
University of Kentucky
232 James F. Hardyman Building
Lexington, KY 40506-0633

Office: (859) 257-6745
Fax: (859) 323-3740
tyu@cs.uky.edu
<http://www.cs.uky.edu/~tyu>

a. Professional Preparation

Sichuan University Software Engineering, B.E. (June 2008).

University of Nebraska-Lincoln Computer Science, M.S. (Dec 2010).

University of Nebraska-Lincoln Computer Science, Ph.D. (Aug 2014).

b. Appointments

08/2014 – present Assistant Professor, Department of Computer Science, University of Kentucky, Lexington, KY.

c. Products

i) Relevant Products

1. Y Wang, L. Wang, T. Yu, J. Zhao, X. Li, “Automatic Detection and Validation of Race Conditions in Interrupt-Driven Embedded Software”, *In Proceedings of the 26th International Symposium in Software Testing and Analysis (ISSTA)*, Santa Barbara, CA, 2017, pp. 113-124.
2. T. Yu, X. Qu and M. B. Cohen, “VDTest: An Automated Framework to Support Testing for Virtual Devices”, *In Proceedings of ACM/IEEE International Conference on Software Engineering (ICSE)*, Austin, TX, May 14 - 22, 2016, pp. 583-594.
3. T. Yu and M. B. Cohen, “SimStack: Guided Test Generation for Finding Worst-Case Stack Usage in Embedded Systems”, the *Proceedings of IEEE International Conference on Software Testing, Verification, and Validation (ICST)*, Graz, Austria, April 13-April 17, 2015, pp. 312-322.
4. T. Yu, W. Srisa-an, M. B. Cohen and G. Rothermel, “SimLatte: A Framework to Support Testing for Worst-Case Interrupt Latencies in Embedded Software”, the *Proceedings of IEEE International Conference on Software Testing, Verification, and Validation (ICST)*, Cleveland, Ohio, March 31-April 4, 2014, pp. 313-322.
5. T. Yu, W. Srisa-an, and G. Rothermel, “SimTester: A Controllable and Observable Testing Framework for Embedded Systems”, the *Proceedings of the IEEE International Conference on Virtual Execution Environments (VEE)*, London, England, March 1-4, 2011, pp. 51-62.

ii) Additional Products

1. T. Yu, T. Zaman, C. Wang, “DESCRY: Reproducing System-level Concurrency Failures”, *In Proceedings of International Symposium on the Foundations of Software Engineering (FSE)*, Paderborn, Germany, pp. 694-704, 2017.
2. T. Yu, M. Pradel, “SyncProf: Detecting, Localizing, and Optimizing Synchronization Bottlenecks”, *International Symposium of Software Testing and Analysis (ISSTA)*, Saarbrcken, Germany, July 18-20, 2016, pp. 389-400.

3. T. Yu, W. Srisa-an, and G. Rothermel, “SimRT: An Automated Framework to Support Regression Testing for Data Races”, the *Proceedings of IEEE International Conference on Software Engineering (ICSE)*, Hyderabad, India, May 31-June 7, 2014, pp. 48-59.
4. T. Yu, W. Srisa-an, and G. Rothermel, “An Approach to Testing Commercial Embedded Systems”, *Journal of Systems and Software (JSS)*, Volume 88, 2014, pp. 48-59.
5. T. Yu, W. Srisa-an, and G. Rothermel, “Using Property-Based Oracles when Testing Embedded System Applications”, the *Proceedings of IEEE International Conference on Software Testing, Verification, and Validation (ICST)*, Berlin, Germany, March 21-25, 2011, pp. 100-109.

d. Synergistic Activities

System Construction: SimExplorer: A VM-based Observable and Controllable Testing Framework.

Service: Organizing Committee: ASE 2015 (Local Organization Chair); RET 2017 workshop (Program Co-chair, co-located with RE); TECPS 2017 workshop (Organizer, co-located with ISSSTA). Program Committees: ICST 2016, ICST Tool Track 2016, ICISS 2016, ICSE SRC 2017, EIT 2017, RE 2017. Reviewer for: IEEE Transactions on Software Engineering (TSE); IEEE Transactions on Software Reliability (TR); Transactions on Embedded Computing Systems (TECS); Journal of Software Testing, Verification and Reliability (STVR); Journal of Systems and Software (JSS); Journal of Empirical Software Engineering (EMSE) Journal of Software: Evolution and Process (JSME); Journal on Software and Systems Modeling (SoSyM); Frontier of Computer Science (FCS).