

Mahdi Eslamimehr

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Current Affiliation

2015 - Present Researcher at Communication Design Group / Viewpoints Research Institute
Visiting Project Scientist at UCLA

Research Interests

Software Testing
Programming Languages
Compiler Construction

Education

- 2008-2014 **Ph.D. computer science**, *University of California, Los Angeles*, Los Angeles, CA, USA.
Advised by Jens Palsberg. Thesis: "Directed Testing of Event-Driven and Parallel Programs."
- 2006–2008 **M.Sc. computer science**, *Linkoping University*, Linkoping, Sweden.
Advised by Kristian Sandahl and Mariam Kamkar. Thesis: "A survey of Model-Based Testing and Industrial Tools."
- 2001–2006 **B.Sc. computer science**, *Sharif University*, Tehran, Iran.

Publications

- 2016 Oren Freiberg, Jens Palsberg, Mahdi Eslamimehr. **Retargetable Communication for Distributed Programs**. In Proceedings of 12th International ACM Sigsoft Conference on the Quality of Software Architectures (QoSA'16).
- 2015 Mahdi Eslamimehr, George Edwards. **End-to-End Cross-Language Test Case Generation for Web Applications**. In Proceedings of 9th ACM SIGMETRICS International Conference on Performance Evaluation Methodologies and Tools (ValueTools'15).
- 2015 Mahdi Eslamimehr, Mohsen Lesani. **AtomChase: Directed Search Towards Atomicity Violations**. In Proceedings of The 26th IEEE International Symposium on Software Reliability Engineering (ISSRE'15), **Best Paper Award**.
- 2015 Hesam Samimi, Alessandro Warth, Mahdi Eslamimehr, Alan Borning. **Constraints as a Design Pattern: from Sketchpad61 to Sketchpad14**. In Proceedings of ACM SIGPLAN International Symposium on New ideas, New Paradigms, and Reflections on Programming and Software (Onward!'15).
- 2015 Mahdi Eslamimehr, Hesam Samimi. **Timing Analysis of Event-Driven Programs with Directed Testing**. In Proceedings of WCET'15, 15th International Workshop on Worst-Case Execution Time Analysis, satellite workshop of the 27th Euromicro Conference on Real-Time Systems (ECRTS 2015).
- 2014 Mahdi Eslamimehr, Jens Palsberg. **Sherlock: Scalable deadlock detection for concurrent programs**. In Proceedings of ACM SIGSOFT International Symposium on the Foundations of Software Engineering (FSE'14).
- 2014 Mahdi Eslamimehr, Jens Palsberg. **Race Directed Scheduling of Concurrent Programs**. In Proceedings of ACM SIGPLAN Annual Symposium on Principles and Practice of Parallel Programming (PPOPP'14).
- 2013 Mahdi Eslamimehr, Jens Palsberg. **Testing versus static analysis of maximum stack size**. In Proceedings of 37nd IEEE International Conference on Computer Software and Applications (COMPSAC'13).

Patents

- 2013 Mahdi Eslamimehr, Jens Palsberg. **Race Directed Scheduling of Concurrent Programs**. Case No. UC-2014-323-1-LA. Serial No. 61/904,977, filed November 15, 2013.

Service

- 2016 **Journal Reviewer**. International Journal of Computers and Applications.
- 2015 **Journal Reviewer**. Journal of Scientific Programming.
- 2015 **Journal Reviewer**. Software: Practice and Experience(SPE).
- 2015 **Journal Reviewer**. IEEE Transactions on Software Engineering(TSE).
- 2015 **Conference Reviewer**. International Conference on Computer and Communication Technology (ICCCT).
- 2015 **Conference Program Committees**. Programming Language Design and Implementation (PLDI) Artifact Evaluation Committee.
- 2015 **Conference Program Committees**. Code Generation and Optimization (CGO) Artifact Evaluation Committee.
- 2015 **Conference Program Committees**. Principles and Practice of Parallel Programming (PPOPP) Artifact Evaluation Committee.
- 2015 **Conference Program Committees**. Principles of Programming Languages (POPL) Artifact Evaluation Committee.
- 2014 **Conference Program Committees**. Object-Oriented Programming, Systems, Languages and Applications (OOPSLA) Artifact Evaluation Committee.
- 2014 **Conference Program Committees**. European Conference on Object-Oriented Programming (ECOOP) Artifact Evaluation Committee.

Invited talks

- 2014 **Directed Scheduling of Concurrent Programs**. UCLA Tech Forum.
- 2013 **Event-Based Directed Testing**. Howard Hughes Lab, Malibu.
- 2012 **Directed Testing: From FPGAs to Supercomputers**. Intel, Seattle.
- 2010 **Scalable Topology Language for Many-Core Processors**. Samsung Labs, San Jose.
- 2010 **Enhancing Components Configuration Language on SPARTA**. Samsung Labs, San Jose.
- 2007 **Model Based testing: State of Art**. Ericsson AB, Finland.

Academic honors

- 2013 **Open Science Data Cloud PIRE National Science Foundation Scholarship**
- 2009-2011 **UCLA Graduate Division Fellowship**
- 2001 **Ranked 31st among more than 1,000,000 applicants in the Iran's nationwide university entrance exam**

Positions held

Industry

- Summer 2011 **Software Engineering Intern**, *Utopia Compression*, Los Angeles, US.
- Summer 2010 **Software Engineering Intern**, *Samsung Lab.*, San Jose, US.
- 2007-2008 **Software Engineer**, *Ericsson AB*, Stockholm, Sweden.
- Summer 2007 **Software Engineering Intern**, *Conformiq Qtronic*, Helsinki, Finland.
- Summer 2005 **Software Engineering Intern**, *World Food Program, United Nation*, Tehran, Iran.

Academy

- 2014-2015 **Visiting Faculty at University of California, Los Angeles**, *Dept. of Computer Science*, Los Angeles, US.

2013-2014 **Adjoint Faculty at California State Polytechnic University, Pomona**, *Dept. of Computer Science, and Industrial and Manufacturing Engineering*, Pomona, US.

Research

2014 - 2015 **Postdoctoral Scholar at SAP Labs.**

2014 **Postdoctoral Scholar at UCLA Compiler Group.**

Teaching

As the Instructor

Spring 2014 **Software Engineering**, *Calpoly Pomona*, Department of Computer Science.

Spring 2014 **Object Oriented Design**, *Calpoly Pomona*, Department of Computer Science.

Spring 2014 **Industrial Computation**, *Calpoly Pomona*, Department of Industrial and Manufacturing Engineering.

Winter 2014 **Object Oriented Design**, *Calpoly Pomona*, Department of Computer Science.

Winter 2014 **Industrial Computation**, *Calpoly Pomona*, Department of Industrial and Manufacturing Engineering.

Fall 2013 **Object Oriented Design**, *Calpoly Pomona*, Department of Computer Science.

Fall 2013 **Industrial Computation**, *Calpoly Pomona*, Department of Industrial and Manufacturing Engineering.

As a Teacher Assistant

Winter 2013 **Java Applications**, *UCLA*, Department of Math.

Fall 2012 **Compiler Construction**, *UCLA*, Department of Computer Science.

Fall 2011 **Compiler Construction**, *UCLA*, Department of Computer Science.

Winter 2010 **Introduction to Computer Science 2**, *UCLA*, Department of Computer Science.

Fall 2007 **Software Engineering**, *Linkoping University*, Department of Computer and Information Science.

Fall 2007 **Data Structures and Algorithms**, *Linkoping University*, Department of Computer and Information Science.

Fall 2007 **Human Computer Interactions**, *Linkoping University*, Department of Computer and Information Science.

Spring 2005 **Data Structures and Algorithms**, *Sharif University*, Department of Computer Engineering.

Fall 2005 **Data Structures and Algorithms**, *Sharif University*, Department of Computer Engineering.

Fall 2004 **Theory of Machines and Languages**, *Sharif University*, Department of Computer Engineering.

Fall 2003 **Advanced programming in C++**, *Sharif University*, Department of Computer Engineering.