Joel Galenson

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Berkeley, CA 94720

Research Program synthesis, static and dynamic analysis, testing, compilers, language design

Interests

AWARDS

EDUCATION University of California, Berkeley 2014

Ph.D

Advisors: Rastislav Bodik and Koushik Sen

Stanford University 2008

B.S. (honors, distinction)

Honors and 2nd place, LIVE 2013 2013

Best Student Paper Award, ADKDD 08 2008 Winner of 3D video game competition at Stanford 2007

Tau Beta Pi (junior year) 2007

Publications Joel Galenson. Dynamic and Interactive Synthesis of Code Snippets. Ph.D. Dissertation, 2014.

Joel Galenson, Philip Reames, Rastislav Bodik, Bjoern Hartmann, and Koushik Sen. CodeHint: Dynamic and Interactive Synthesis of Code Snippets. In *International Conference on Software Engineering (ICSE 2014)*, Hyderabad, India, 2014.

Mihai Budiu, Joel Galenson, and Gordon D. Plotkin. The Compiler Forest. In *Proceedings of the 22nd European conference on Programming Languages and Systems (ESOP 2013)*, Rome, Italy, 2013.

David Gay, Joel Galenson, Mayur Naik, and Kathy Yelick. Yada: Straightforward Parallel Programming. In *Parallel Computing*, Elsevier, 2011.

Rastislav Bodik, Satish Chandra, Joel Galenson, Doug Kimmelman, Nicholas Tung, Shaon Barman, and Casey Rodarmor. Programming with Angelic Nondeterminism. In *Proceedings of the 37th Symposium on Principles of Programming Languages (POPL 2010)*, Madrid, Spain, 2010.

Jason Auerbach, Joel Galenson, and Mukund Sundararajan. An empirical analysis of return on investment maximization in sponsored search auctions. In *Proceedings of the Second International Workshop on Data Mining and Audience Intelligence for Advertising (ADKDD 2008)*, Las Vegas, Nevada, USA, 2008.

EXPERIENCE Graduate Student Researcher, University of California, Berkeley Fall 2008 - Summer 2014

Am a member of the Parallel Computing Laboratory (Par Lab).

Teaching Assistant, University of California, Berkeley Spring 2014

Was a TA for CS 61B: Data Structures.

Intern, Microsoft Research Silicon Valley Summer 2011

Worked on an architecture for modular cooperating compilers.

Intern, Microsoft Research Silicon Valley

Summer 2010

Worked on a new architecture for evaluating LINQ queries that encompasses DryadLINQ.

Teaching Assistant, University of California, Berkeley

Fall 2009

Was a TA for CS 164: Programming Languages and Compilers.

Intern, IBM T.J. Watson Research Center

Summer 2009

Worked on the constraint-based type system for the X10 language.

Platform intern, Mozilla

Summer 2008

Worked on a native code compiler for regular expressions.

Section Leader for CS 106, Stanford University

Fall 2005 - Summer 2008

Taught a section covering introductory programming topics, graded homework and exams, staffed a help desk.

Researcher, Stanford University

Summer 2006 - Spring 2008

- Built a verifying compiler for Zohar Manna and Aaron Bradley.
- Worked on two static analysis tools for Zohar Manna.
- Investigated the properties of online ad auctions and bidder strategies with Tim Roughgarden.
- Developed methods to enable the use of remote computers to speed up data processing by a robot for Andrew Ng.
- Developed techniques for visualizing personal information spaces for Pat Hanrahan.

Teaching Assistant, Stanford University

Winter 2008

Was a TA for CS 156: Calculus of Computation.

Resident Computer Consultant, Stanford University

Fall 2006 - Spring 2008

Fall 2013 - Spring 2014

Fall 2013 - Spring 2014 Fall 2009 - Present

Assisted undergraduates with personal computer problems and administered a dorm network.

PROFESSIONAL	
Activities	

Artifact Evaluation Committee: POPL
External reviewer: PLDI, CAV
External reviewer: ASPLOS, OOPSLA, VMCAI
Graduate Admissions Committee, UC Berkeley

2013 2009

2015

2014

LEADERSHIP

Computer Science Graduate Student Association member
Graduate Assembly committee representative
Organized UC Berkeley Programming Languages seminars

Computer Skills C, C++, Java, Scala, OCaml, C#, Python, JavaScript, LATEX, HTML

References

Available on request