Osbert Bastani

Employment

2018-	**Research Assistant Professor in Computer and Information Sciences**, *University of Pennsylvania*, Philadelphia, PA.
2017-2018	**Postdoctoral Fellow in CSAIL**, *Massachusetts Institute of Technology*, Cambridge, MA.
2015	**Research Intern**, *Microsoft Research*, Cambridge, UK.
2014	**Research Intern**, *Google Research*, Mountain View, CA.
2013	**Research Intern**, *Technicolor Research Labs*, Palo Alto, CA.

Education

2012-2018	**Ph.D. in Computer Science**, *Stanford University*, Stanford, CA.
2008-2012	**A.B. in Mathematics**, *Harvard University*, Cambridge, MA.

Publications

Halley Young, Osbert Bastani, and Mayur Naik. Learning neurosymbolic generative models via program synthesis. *ICML*, 2019.

Osbert Bastani, Yewen Pu, and Armando Solar-Lezama. Verifiable reinforcement learning via policy extraction. *NeurIPS*, 2018.

Osbert Bastani, Rahul Sharma, Alex Aiken, and Percy Liang. Active learning of points-to specifications. *PLDI*, 2018.

Yu Feng, Ruben Martins, Osbert Bastani, and Isil Dillig. Program synthesis using conflict-driven learning. *PLDI*, 2018.

Osbert Bastani, Carolyn Kim, and Hamsa Bastani. Interpretability via model extraction. *FAT/ML*, 2017.

Osbert Bastani, Rahul Sharma, Alex Aiken, and Percy Liang. Synthesizing program input grammars. *PLDI*, 2017.

Yu Feng, Osbert Bastani, Ruben Martins, Isil Dillig, and Saswat Anand. Automated synthesis of semantic malware signatures using maximum satisfiability. *NDSS*, 2017.

Osbert Bastani, Yani Ioannou, Lenonidas Lampropoulos, Dimitrios Vytiniotis, Aditya Nori, and Antonio Criminisi. Measuring neural net robustness with constraints. *NIPS*, 2016.

Lazaro Clapp, Osbert Bastani, Saswat Anand, and Alex Aiken. Minimizing gui event traces. *FSE*, 2016.

Osbert Bastani, Saswat Anand, and Alex Aiken. An interactive approach to mobile app verification. *MobileDeLi*, 2015.

Osbert Bastani, Saswat Anand, and Alex Aiken. Interactively verifying absence of explicit information flows in android apps. *OOPSLA*, 2015.

Osbert Bastani, Saswat Anand, and Alex Aiken. Specification inference using context-free language reachability. *POPL*, 2015.

Osbert Bastani, Christopher Hillar, Dimitar Popov, and Maurice Rojas. Randomization, sums of squares, near-circuits, and faster real root counting. *Contemporary Mathematics*, 2011.

Honors

2018	**PLDI Distinguished Paper Award**.
2015-2017	**Google Ph.D. Fellowship**.
2012-2013	**Stanford School of Engineering Fellowship**.

Invited Talks

2019	**ICLR Workshop on Debugging Machine Learning Models**.
2018	**CPS Week Workshop on Design and Analysis of Robust Systems**.

Service

2019	**POPL 2020**, Program Committee Member.
2019	**NeurIPS 2019**, Reviewer.
2019	**CAV 2019**, Program Committee Member.
2019	**ICML 2019**, Reviewer.
2018	**PLDI 2019**, External Program Committee Member.
2017	**PLDI 2018**, External Program Committee Member.

Teaching

2016	**Teaching Assistant**, *Stanford University*, CS 265: Randomized Algorithms and Probabilistic Analysis.
2016	**Teaching Assistant**, *Stanford University*, CS 229T: Statistical Learning Theory.
2011	**Teaching Assistant**, *Harvard University*, Math 124: Number Theory.