Osbert Bastani

Education

2012-2017 **Ph.D. in Computer Science (expected)**, *Stanford University*, Stanford, CA.

2008-2012 **A.B. in Mathematics**, *Harvard University*, Cambridge, MA.

Publications

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.

Working Papers

Osbert Bastani, Alex Aiken, and Percy Liang. Active learning of points-to specifications. 2016.

Osbert Bastani, Lazaro Clapp, Saswat Anand, and Alex Aiken. Eventually sound points-to analysis with missing code. 2016.

Honors

2015-2017 **Google Ph.D. Fellowship**.

2012-2013 **Stanford School of Engineering Fellowship**.

Industry

2015 **Research Intern**, *Microsoft Research*, Cambridge, UK.
Developed new algorithms for finding adversarial examples for deep neural networks.

2014 **Research Intern**, *Google*, Mountain View, CA.
Worked on modeling the Android app life cycle and on the Android static analysis infrastructure (implemented SSA, live variables analysis, points-to analysis, reachability analysis, and taint analysis).

2013 **Research Intern**, *Technicolor Research Labs*, Palo Alto, CA.
Developed probabilistic extension of generalized binary search for interactively eliciting user preferences.

+1 (972) 822 6868 • *obastani@cs.stanford.edu* • *cs.stanford.edu/~obastani*

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.