# 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, 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

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.

# 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.