Anton Xue

Address
17 Broadway 2L
New Haven, CT 06511

Contact
antonxue.github.io
anton.xue@yale.edu

Interests Programming languages, formal methods, automata theory, cyber-physical systems mathematical analysis, linear algebra, combinatorics

Work Experience

Research Assistant — Sept 2015 – Present
Yale University Department of Computer Science

Research Intern — May 2018 – Aug 2018
Harvard University School of Engineering and Applied Sciences

Research Intern — May 2017 – Aug 2017
Max Planck Institute for Software Systems

Education

B.S. Mathematics and Computer Science — Aug 2015 – May 2019
Yale University

Grants Yale College Freshman Summer Research Fellowship 2016

Publications

Lazy Counterfactual Symbolic Execution
Programming Language Design and Implementation 2019

Presentations

Towards the Formalization and Analysis of R — Nov 2018
Formal Methods in Computer-Aided Design 2018 Student Forum

Building a Symbolic Execution Engine for Haskell — Nov 2017
Formal Methods in Computer-Aided Design 2017 Student Forum

Building a Symbolic Execution Engine for Haskell — Aug 2017
Tools for Automatic Program Analysis 2017

A Symbolic Execution Framework for Haskell — Jan 2017
Principles of Programming Languages 2017 Student Research Competition

Teaching

Yale Undergraduate Teaching Assistant

MATH 305 Real Analysis (Course Grader)	Spring 2019
CPSC 202 Mathematical Tools for Computer Science	Fall 2016, Fall 2017, Fall 2018
CPSC 366 Intensive Algorithms	Spring 2018
CPSC 365 Design and Analysis of Algorithms	Spring 2017

Community

Department Student Advisory Committee — Fall 2017 – Spring 2018
Yale University Computer Science Department

Software

G2 Symbolic Execution Engine for Haskell
`https://github.com/BillHallahan/G2`

Simple-R Symbolic Execution Engine for R
`https://github.com/AntonXue/simple-r`

Multi-Terminal Interval Decision Diagrams
`https://github.com/dzufferey/mtidd`

Technical

Programming Languages
Haskell, C, C++, Python, Java, R, Scala, SMTLIB, LaTeX