

## Anton Xue

## Address

17 Broadway 2L  
New Haven, CT 06511

## Contact

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

## Interests

Programming languages, automata theory, formal methods  
mathematical analysis, linear algebra, combinatorics

## Work

## Experience

Research Intern  
Nokia Bell Labs

06/2019 – Present

Research Assistant

Yale University Department of Computer Science

09/2015 – 05/2019

Research Intern

Harvard John A. Paulson School of Engineering and Applied Sciences

05/2018 – 08/2018

Research Intern

Max Planck Institute for Software Systems

05/2017 – 08/2017

Software Engineering Intern

Harvard Medical School

05/2014 – 08/2015

## Education

*B.S. Mathematics and Computer Science*  
Yale University

08/2015 – 05/2019

## Awards and Honors

University of Pennsylvania ENIAC Fellowship

08/2019

Yale Computer Science Award

05/2019

National Science Foundation Graduate Research Fellowship

04/2019

Yale College Freshman Summer Research Fellowship

04/2016

## Publications

*G2Q: Haskell Constraint Solving*  
Haskell Symposium 2019

08/2019

*Lazy Counterfactual Symbolic Execution*  
PLDI 2019

06/2019

## Presentations

*Towards the Formalization and Analysis of R*  
FMCAD 2018 Student Forum

11/2018

*Building a Symbolic Execution Engine for Haskell*  
FMCAD 2017 Student Forum

11/2017

Building a Symbolic Execution Engine for Haskell  
TAPAS 2017

08/2017

*A Symbolic Execution Framework for Haskell*  
POPL 2017 Student Research Competition

01/2017

<b>Teaching</b>	<i>Yale Undergraduate Teaching Assistant</i>	
	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
	Yale University	
<b>Community</b>	<i>Student Volunteer</i>	06/2019
	PLDI 2019	
	<i>Department Student Advisory Committee</i>	Fall/2017, Spring/2018
	Yale University Computer Science Department	
	<i>Student Volunteer</i>	07/2017
	CAV 2017	
<b>Software</b>	<i>G2 Symbolic Execution Engine for Haskell</i>	
	<a href="https://github.com/BillHallahan/G2">https://github.com/BillHallahan/G2</a>	
	<i>Simple-R Symbolic Execution Engine for R</i>	
	<a href="https://github.com/AntonXue/simple-r">https://github.com/AntonXue/simple-r</a>	
	<i>Multi-Terminal Interval Decision Diagrams</i>	
	<a href="https://github.com/dzufferey/mtidd">https://github.com/dzufferey/mtidd</a>	
<b>Technical</b>	<i>Programming Languages</i>	
	Haskell, C, C++, Python, Java, R, Scala, SMTLIB, $\text{\LaTeX}$	