

Chelsea Voss

csvoss@mit.edu
+1 408 219 3764

website: csvoss.mit.edu github: [csvoss](https://github.com/csvoss)
20 Lopez Street, Cambridge, MA 02139

Education	Massachusetts Institute of Technology S.B. in Computer Science, minor in Mathematics (2015). GPA: 4.9/5.0. Master of Engineering in Computer Science, in progress (2016). <i>Coursework:</i> Advanced data structures, advanced algorithms, cryptography, machine learning, compiler design, randomized algorithms, quantum computing, program analysis <i>Teaching:</i> 6.149, Introduction to Python – Lab Assistant – January 2015 18.404/6.840, Theory of Computation – TA – Fall 2015
Experience	Khan Academy • Software Engineering Intern Summer 2015 I reduced deploy times by implementing a project to improve how we serve translation files for internationalized sites. I also rewrote a database model to behave transactionally, collaborated on internationalization projects, and co-wrote a mobile app for our hackathon. User Interface Design Group, MIT CSAIL • Researcher Summer 2014 As a project mentor, I led a team of students in coding interactive tools for online education, providing tutoring in web programming. As a researcher, I further developed my interactive organic chemistry project, writing a parser to read molecules from strings. edX • Software Engineering Intern Summer 2013 I designed and implemented an API framework to allow users to create and earn badges in the edX platform, and an interface for students to see badges they have earned, compatible with Mozilla's Open Badges standard. Weiss Lab for Synthetic Biology, MIT • Researcher Spring–Fall 2012 I modeled molecular interactions in order to compare our designs for <i>in vivo</i> DNA logic gates, and performed lab experiments to measure the transfer functions of those logic gates. Our team presented our project at the iGEM World Championship. Dill Hardware Verification Group, Stanford • Intel STS Project 2010 I modeled a biological pathway as an asynchronous boolean circuit, and used model checking to show that the computational model matched <i>in vivo</i> results. I presented my project as a finalist in the Intel Science Talent Search 2011, a national science fair.
Leadership	TA, Head TA • USA Biology Olympiad June 2012, 2013, 2014 I tutored the USA's top 20 high school biology students in lab techniques, taught seminar classes on theoretical skills including Bayesian probability and phylogenetic algorithms, and developed lab practical tasks for the students' intense final exams. IAP Coordinator • Student Information Processing Board January 2015 I recruited teachers and organized 15+ programming seminars for the MIT community – including C++, Haskell, system design, and app programming – as the Independent Activities Period coordinator for SIPB, MIT's computing student group. Teacher, Admin • MIT Educational Studies Program 2011–2015 As a teacher, my 100+ hours of teaching experience include a 40-hour summer course on theoretical computer science I designed, <i>Mathematical Insights in Computing</i> . As an admin, I directed <i>Firehose 2012</i> and <i>Splash-for-U3 2014</i> , one-day events reaching hundreds of people.
Achievements	International Biology Olympiad, Gold Medalist, USA Team Member, 2010 and 2011 International Linguistics Olympiad, USA Team Member, 2011 National Finalist, Intel Science Talent Search, 2011 Front page of Hacker News: Python One-liner , Traceroute , Retroactive Data Structures
Programming	Python, Java functional programming: Haskell, Scala, Scheme, Coq web programming: Javascript, HTML/CSS, jQuery, Django, Meteor, AngularJS, Ionic