

# Jason Gross

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## PRESENT ADDRESS

258 Prospect Street, Apt # 1L  
Cambridge, MA 02139

## PERMANENT ADDRESS

126 Hayrick Lane  
Commack, NY 11725

## EDUCATION

**Massachusetts Institute of Technology**, Cambridge, MA

Began Doctorate of Philosophy in Computer Science in September 2013

Current G.P.A. 4.8/5.0

Bachelor of Science in Mathematics and Physics, June 2013

G.P.A. 4.6/5.0

Relevant Coursework: Security, Program Analysis, Performance Engineering of Software, Statistical Physics, Quantum, Topology, Analysis, Waves & Vibrations, Special Relativity, Algebra

## EXPERIENCE

### MIT

September 2013–Present

*Researcher*

Cambridge, MA

- Researching program synthesis and verification with Adam Chlipala
- Collaboratively working on one of the world's first algorithm-level-optimizing compilers
- Collaboratively implemented proven-correct crypto code now used by Google Chrome

### Google

June 2016–September 2016

*Software Engineering Intern*

Mountain View, CA

- Formalized low-level ECC primitives with proofs of correctness

### MIT

September 2015–December 2015

*TA for 6.172 (Performance Engineering)*

Cambridge, MA

- Created and led recitations, taught students, and helped run class
- Analyzed and explained assembly output of `gcc -O3` to teach vectorization

### Microsoft Research

June 2014–August 2014

*Intern*

Cambridge, United Kingdom

- Created a language for specifying input/output behavior of x86 assembly programs with Andrew Kennedy and Nick Benton; Verified the I/O behavior of a number of simple programs

## COMPUTER SKILLS

- Proficient skills – Coq,  $\text{\TeX}$  macro language, Mathematica, git, Python, JavaScript, BASIC
- Working knowledge –  $\text{\LaTeX}$ , C, C++, Agda, Haskell, Scheme, HTML, CSS, Perl, Java
- Basic knowledge – Matlab, OCaml, Idris, Ruby, Ur/Web, x86 Assembly

## HONORS AND AWARDS

- Collection of 12 original K'NEX synagogue models exhibited in various museums (2004–2008)

## EXTRACURRICULAR ACTIVITIES

- Co-maintainer of the homotopy type theory Coq repository (HoTT/HoTT on GitHub)
- Committer to the SIPB BarnOwl project (<http://barnowl.mit.edu>)
- Was project leader for MITeX, an online interface for composing  $\text{\LaTeX}$
- Canada/USA Mathcamp (Summers 2006–2009)