

Education

B.A. (with honors), *Computer Science and Mathematics*, Harvard University, Cambridge, MA. 2013.

Thesis: Securing Public-key Cryptography on the Android Platform.

Advisors: Stephen Chong and Aslan Askarov.

Minor: Near Eastern Languages and Civilizations.

Language Citation: Modern Hebrew.

Graduate Coursework: Cryptography and Programming Languages.

Harvard Study Abroad in Jerusalem, The Hebrew University, Jerusalem, Israel. Summer 2011.

Awards & Honors

Certificate of Distinction in Teaching, *Harvard University*, 2013.

Student Research Competition Finalist, *Programming Languages Design and Implementation*, 2013.

Blumberg Creative Science Prize, *Harvard University*, Undergraduate thesis award, 2013.

Programming Languages Mentoring Workshop Scholarship, *To attend Principles of Programming Languages 2013*, 2012.

David Rockefeller International Experience Grant, *Harvard University*, 2011, To study in Israel.

Publications

Theses

Securing Public-key Cryptography on the Android Platform, *Hannah Gommerstadt*, Undergraduate Honors Thesis, Harvard University. March 2013.

Awarded High Honors by the Computer Science Department. Designed type system and implemented static analysis to enforce secure cryptographic protocols on the Android platform. Advised by Stephen Chong and Aslan Askarov.

Posters

Securing Public-key Cryptography on the Android Platform, *Hannah Gommerstadt*, Poster at Programming Languages Design and Implementation (PLDI) 2013 (Student Research Competition), Seattle, WA, June 2013.

Talks

Securing Public-key Cryptography on the Android Platform

- Programming Languages Design and Implementation (PLDI) Student Research Competition Finalist Talk, Seattle, WA. June 19, 2013.
- Programming Languages Seminar, Harvard University, Cambridge, MA. April 17, 2013.

One Minute Madness, Programming Languages Mentoring Workshop (PLMW) 2013, Rome, Italy. January 22, 2013.

Research & Industry Positions

Software Development Engineer, *Microsoft Inc.*, Visual Studio/Online Services, Redmond, WA, July 2013 - present.

Specialized in back-end engineering for content management systems.

Software Development Engineer Intern, *Microsoft Inc.*, Windows Server, Redmond, WA. May 2012 - August 2012.

Built a cloud-based searchable logging system using Lucene and Windows Azure.

Research Assistant, *Programming Languages Group*, Harvard University Computer Science Department, Cambridge, MA, June 2011 - January 2012.

Worked on the DARPA CRASH-SAFE project and wrote test programs in the Breeze research language. Supervised by Greg Morrisett.

Software Developer, *Harvard Mathematics Department*, Cambridge, MA. June 2010 - September 2012. Developed web-based course software and provided software support to students and staff.

Software Developer, *Harvard Student Agencies*, Cambridge, MA. June 2010 - June 2011. Implemented features for the Rick Steve's Travel Guides iPhone applications.

Research Assistant, *Intelligent and Interactive Systems Group*, Harvard University Computer Science Department, Cambridge, MA, January 2010.

Analyzed data on weather patterns aggregated from Flickr photos to track climate change. Supervised by Krzysztof Gajos.

Teaching Experience

Harvard University (Cambridge, MA)

Assistant Head Teaching Fellow, *CS51: Introduction to Computer Science II*, Spring 2013, Spring 2012. Taught functional and object-oriented programming, graded, designed course materials, held office hours, supervised term projects, and managed 200-250 person class and teaching staff. Taught by Greg Morrisett.

Head Course Assistant, *Winter Session Discrete Math*, Winter 2013, Winter 2012.

Designed and taught an accelerated introductory discrete math course to prepare 40 students for advanced courses in theoretical computer science. Taught by Emily Riehl (2013) and Paul Bamberg (2012).

Course Development Assistant, *CS 186: Economics and Computation*, Summer 2011.

Wrote problem set specifications and worked on simulation frameworks. Taught by David Parkes.

Teaching Fellow, *CS51: Introduction to Computer Science II*, Spring 2011.

Taught functional and object-oriented programming, graded, designed course materials, held office hours and supervised term projects. Taught by Greg Morrisett.

Service & Community

Service

Alumni Interviewer, *Harvard Admissions Office*, Seattle, Washington, 2013 - 2014.

Interviewed high school seniors applying to Harvard and wrote reports for the admissions office.

Teaching Assistant, *Technology Education and Literacy in Schools*, Lower Yukon, Alaska, 2013 - 2014. Taught Introduction to Computer Science to high school students remotely.

Project Leader, *MathFest*, Seattle, WA, 2013.

Assisted in organizing day of math and puzzles for elementary school students.

Undergraduate Contributor, *Bok Teaching Blog*, Harvard University, Cambridge, MA, 2012.

Wrote a series of blog posts about my experiences being an undergraduate teaching fellow in Computer Science.

Memberships

Association of Computing Machinery (ACM) Student Member, Association of Computing Machinery Special Interest Group on Programming Languages (ACM-SIGPLAN) Student Member

Skills

Languages

Native/Bilingual Proficiency in English and Russian. Advanced Proficiency in French, Hebrew and Spanish.

Programming

C, C#, HTML/CSS, Java, JavaScript, \LaTeX , MATLAB, Objective-C (iOS), OCaml, PHP, Processing, Python, SQL