Amelia Holcomb

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EDUCATION:

Yale University, New Haven, CT   Sep 2012-May 2016
- Bachelor of Arts in Mathematics; GPA: 3.86; *cum laude*
- Selected Computer Science courses: Parallel Programming Techniques, Design & Analysis of Algorithms, Systems Programming & Computer Organization, Automated Decision Systems, Computer Networks

Harbin Institute of Technology, Harbin, China   June 2013-Aug 2013
- Light Fellowship Award for Study Abroad in China
- Advanced Mandarin study, culminating in 2000 character essay on anti-poverty policies in China.

Bard High School Early College, New York City, NY   Sep 2009-June 2012
- Associate of Arts degree (60 college credits) from Bard College; GPA: 4.0

EXPERIENCE:

TechChange, Washington, DC   June 2016-Aug 2016
Technical Fellow
- Designed and implemented security protocol in frontend and backend to interact with file upload API
- Added filtering, permissions system, and other features to frontend and backend, in preparation for launch

Computer Science Department, Yale University   Sep 2015-May 2016
Course Assistant, Design & Analysis of Algorithms and Introduction to Computing (CS50)
- Helped students master key concepts, develop algorithms, and debug code; tutored up to 15 students/hour
- Supervised and graded students' final projects, advising on program design and providing mentorship

Information and Technology Services, Yale University   Jan 2014-May 2016
Training Committee Coordinator
- Designed and implemented 2-month training curriculum for student workers, focused on hands-on learning
- Selected, trained, and organized 9 student teachers; coordinated scheduling for 69 new student workers
- Recognized as the top Student Tech employee of 2014-2015 for exceptional work on training curriculum

Student Hardware Specialist
- Diagnosed and repaired under-warranty laptop hardware, resolved software issues, recovered data
- Supervised 4-5 students on shift, directing workflow, answering questions, and overseeing complex repairs

Yale Institute for Network Science, Yale University   Oct 2013-May 2016
Software Engineer
- Created new client-side interface for web application, refactoring code base for use with angularJS
- Implemented 4 self-taught languages (angularJS, jQuery, HTML, CSS) and new data system design to minimize quantity of data sent/received by server and maintain user preferences with each logon

Research Assistant
- Programmed, ran, and collected data from mathematical simulations in R; performed statistical analyses and designed 5 expository figures; assisted in developing project concept and writing journal paper

PUBLICATIONS AND PROJECTS:
- Isakov & Holcomb. Modeling the Role of Networks and Individual Differences in Inter-group Violence. PLOSOne (*Feb 1, 2016*).
- Implemented a modified version of the internet Secure Socket Layer protocol
- Designed and implemented algorithm for scheduling work shifts given employee time preferences
- Implemented Lempel-Ziv-Welch compression algorithm and modified version of UNIX bash shell

SKILLS:
- Computer: Advanced in C, R, HTML/CSS; proficient in JavaScript, jQuery, python, PHP, SQL; Laptop hardware and software troubleshooting and repair (PC and Mac)
- Language: Advanced Mandarin; 7 years of study in reading, writing and speaking