Amelia Holcomb

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ameliaholcomb.github.io

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:

Computer Science Department, Yale University   Sep 2015-Present
Course Manager/Teaching Assistant
Courses: Intro Computing, Data Structures & Programming Techniques, Design & Analysis of Algorithms
- Held office hours and one-on-one tutoring sessions to help students master key concepts and debug code
- Designed lesson plans and taught weekly 1.5 hour section
- Graded student exams and problem sets by providing written feedback and developing edge case tests
- Reviewed assignment specifications and curriculum to advise professor on clarity, difficulty, and content

TechChange, Washington, DC   June 2016-Aug 2016
Technical Fellow
- Assessed and expanded current permissions system to allow fast and fine-grained access control
- Added file upload security protocol and other features to frontend and backend, in preparation for launch

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 standalone AngularJS module for draggable, resizable, minimizable dialog windows that can be filled with arbitrary server-supplied content and maintained across user logons
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, JavaScript, HTML/CSS, R; proficient in Java, 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