Helen Hastings

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Abstract problem solving, programming, leadership through compelling dedication, inquisitiveness and quick self-starting.

EDUCATION

Stanford University Class of 2016
BS Candidate in Computer Science. GPA: 3.98
Thomas Jefferson High School for Science & Technology
Alexandria, VA. Cumulative GPA: 4.51

WORK EXPERIENCE

NerdWallet - Software Engineering Intern (2015, 12 weeks)

- Solely responsible for management and development of a reusable single page web app that educates users about their personal finance situation by demonstrating how they compare to their peers and the US.
- Shipped versions of the tool for credit cards and 401k (nerdwallet.com/where-do-i-stand/creditcards, /401k) after starting from scratch.
- Worked on the Front-End Engineering team as it rebuilt major site functionality using React, Flux, and Node, and contributed to the new architecture.

Google - Software Engineering Intern (2014, 12 weeks)

- Part of Search Infrastructure, specifically the index-building system of web search.
- Wrote two controllers (end-to-end logic in the index-building framework) to create tables for querying from corpora of web documents stored in index repositories.
- My project eliminated a need for an outdated and space-inefficient step in creating said tables, and allowed the tables to be more quickly brought up-to-date by forming them more efficiently and more often.
- Worked in C++ and various Google-specific configuration languages.

Nicira Inc. by VMware - Software Engineering Intern (2013, 12 weeks)

- Contributed to Nicira's NVP (Network Virtualization Platform), now VMware's NSX.
- Wrote support for NVP's controller cluster to be able to add and remove controllers from the cluster without a shutdown and restart of the cluster's coordination system, which was previously required.
- Wrote patch to Apache ZooKeeper.

Employee at Stanford's Virtual Reality Lab (2013-2014 school year, 10 hours / week) (vhil.stanford.edu)

- Developed virtual environments using Python and 3D object editing software.

Network Security, U.S. Naval Research Laboratory – Intern (2011-12, total 18 weeks) (Washington, D.C. - nrl.navy.mil/chacs/)

- Wrote a PDF parser to decrypt PDFs of varying encryptions, unpack PDFs from XML, and analyze PDFs for vulnerabilities using a JavaScript interpreter (C++).
- Wrote Python to detect packed binaries and compare PE files with Fuzzy Hashing.

Teacher's Assistant, High School Java Class (2010, 6 weeks)

LEADERSHIP

she++ [Co-Director & CFO – sheplusplus.org]
A nonprofit working to empower underrepresented groups in technology by rebranding what it means to be a technologist.

Pilot [Bay Area Coordinator - gopilot.org]
An organization that holds hands-on educational events for high school students.

Stanford Tau Beta Pi Engineering Honor Society [Professional Development Chair]

Student Body President of high school of 1800 students

PROGRAMMING

- Well versed with Python, JavaScript, Node.js, C++, C, Java, React, Alt, Flux Architecture, HTML, CSS, Less, MATLAB, SQL, Ruby on Rails, MVC Architecture, git
- Acquainted with jQuery, PHP, C#, Objective C
- Completed classes in operating systems, compilers, web security, cryptography, machine learning, mining big data, networking, NLP, biocomputation, bitcoin