Shane Tully

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Education

B.S. in Computer Science

Pennsylvania State University, University Park, PA   Cumulative GPA: 3.23/4.00

Favorite Courses:

- Systems programming in Unix: Built custom shell in C and simple Make clone.
- Operating Systems Design: Created own CPU scheduler and malloc implementation.

Experience

Mozilla Corporation   **San Francisco, California**

Software Engineering Intern   **May 2013 – August 2013**

- Implemented contacts WebAPI in Firefox for Android.
- Created library for the Gecko engine to be used in third-party Android applications.
- Fixed various bugs in Firefox for Android.

Pennsylvania State University Association for Computing Machinery   **University Park, Pennsylvania**

Webmaster & Officer   **January 2011 – May 2013**

- Helped host bi-annual programming competition, CodePSU.
- Built automated event check-in system by reading PSU ID cards with Python, QT, and MySQL.
- Wrote automated programming competition code submission system utilizing Drupal, PHP, C, and Linux.
- Taught workshops to club members on cryptography, networking, and Android.
- Managed and updated http://acm.psu.edu.

Pennsylvania State University Chemistry Department   **University Park, Pennsylvania**

Web Programmer   **June 2011 – January 2014**

- Developed homework, syllabus, and eBook Drupal/PHP modules for online chemistry courses.
- Built interactive atomic orbital visualization webpages with JavaScript and Java.
- Managed Git server for other team developers.

Activities & Projects

- Open source contributor: http://github.com/shanet.
- Developed AES encrypted, cross-platform chat application in Python and QT.
- Participated in PennApps Fall 2013; won best mobile app with an Android application which uninstalled unwanted applications after a given time interval.
- Wrote API and server for networked, autonomous robot utilizing an iRobot Create and a Microsoft Kinect.
- Built encrypted server and client for controlling volume and multimedia on Linux desktops with C++, OpenSSL, and Android.
- Created interactive LED lighting system with IR sensors and an Arduino.
- Made home automation system to control electrical outlets over a network with Android and NFC tags.
- Five years Linux and server administration experience.