Aaron Bowen

Tufts University • (480) 442 0428 • aaron.bowen@tufts.edu • github.com/aareano

---

EDUCATION

Tufts University, Medford, MA
Bachelor of Science in Computer Science and Electrical Engineering, 2017
GPA: 3.57, Dean's List (all semesters)

RELEVANT COURSES

Algorithms, Programming Languages, Computer System Security, Machine Structure and Assembly Language, Data Structures (audited), Linear Systems, Microprocessor Architecture, Digital Electronics, General Electronics, Probabilistic System Analysis

PROJECTS

Shopify App: Rapidly learned both Ruby and Ruby on Rails to develop a secure, embedded Shopify app for merchant use

Android App: Collaborated with a team of student entrepreneurs to develop an Android app

Image Compression: Pair-programmed software according to narrow specifications to compress a PPM image by 75% and decompressing it back to its original format

Binary Bomb: Derived expected input for a complicated program by reading its AMD64 assembly code – incorrect input would explode a theoretical "bomb"

Blood Pulse Oximeter: Designed and constructed an infrared pulse oximeter sensor and signal cleansing circuit

ACTIVITIES

Tufts PolyHack 2015: Built a snakes-and-ladders game that used web sockets to concurrently handle input from multiple users – achieved finalists status in overall hackathon judging

JumboCode: Led development on student team to build a web app pro-bono for a non-profit

SKILLS

Languages: C, C++, C#, Java, SQL, JavaScript, Python, Ruby, Perl, CSS, HTML, AMD64 Assembly
Software: Git, Microsoft SQL Server, Vim, PowerShell, SPICE, MATLAB, LabVIEW
Frameworks: .Net Framework, AngularJS, NodeJS, ExpressJS, Ruby on Rails
Platforms: Windows, Linux, OS X, Heroku
Hardware: Breadboard wiring, soldering
Foreign Languages: Spanish (intermediate), German (intermediate)

EXPERIENCE

Valetude, LLC. Healthcare Software and Services Wakefield, MA
Software Development Intern *Summer of 2015*

- Led several projects to create secure, data-driven internal web tools (C#, JS, SQL, Git)
- Completed a self-directed data warehousing project using the Extract-Transform-Load methodology (Powershell, C#, Python, SQL, Git)

Olin College of Engineering REU Needham, MA
Undergraduate Engineering Education Researcher *Summer of 2014*

- Researched engineering education by collaborating with professionals in the field and compiling literature reviews
- Analyzed data for human research with a small team of students and mentors
- Implemented qualitative and quantitative statistical analysis with R and Excel

Superior Diesel Inc. Rhinelander, WI
Summer Intern *Summer of 2013*

- Modeled engine housings with SolidWorks and tested the assembled final products
- Created Visual Basic macros in Excel for increased company-wide inventory automation