Aaron Bowen

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EDUCATION Tufts University, Medford, MA

Bachelor of Science in Computer Science and Electrical Engineering, 2017

GPA: 3.52, 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

PROJECTS Image Compression: Pair-programmed software according to narrow specifications for

compressing a PPM image by 75% and decompressing it back to its original format

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

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 everall backathon judging

handle input from multiple users – achieved finalists status in overall hackathon judging

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

SKILLS Languages: C#, C, SQL, JavaScript, CSS, HTML, Java, Python, Perl, C++, VBA, AMD64 Assembly

Software: Git, Microsoft SQL Server, Vim, PowerShell, LTspice IV (circuit design)

Frameworks and Technologies: .Net Framework, AngularJS, NodeJS, ExpressJS, 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

- Learned the basic functions of the Purchasing, Engineering, Production, Sales, and Accounting departments by rotating through each
- Created Visual Basic macros in Excel for the automation of data formatting in several departments and company-wide inventory organization