Clay Buxton

Education

Elizabethtown College | Bachelor of Science | Elizabethtown, Pa

3.33 GPA | 2020

· Majors: Computer Engineering and Computer Science.

· Honors: Presidential Scholar.

Relevant Course Work

· Engineering: Calculus I, II, III. Differential Equations. Physics I, II. Circuit Analysis. Introduction to Engineering I, II.

• Computing: Computer Science I, II. Computer Organization and Architecture. Systems Programming.

Microcomputer Architecture, Advanced Computer Engineering.

Experience

Software Engineer at **Lockheed Martin** | King of Prussia, Pa

May 2018 - Present

- · Working primarily with Software Defined Radios (GNURadio)
- · Created a scalable platform on which C++ based GNURadio flowgraphs can be deployed easily and quickly
- · Working on a team of developers, using enterprise grade tools and platforms

Computer Engineering TA at **Elizabethtown College** | Elizabethtown, PA

May 2018 – Present

 $Computer\ Organization\ and\ Architecture,\ Microcomputer\ Architecture,\ Advanced\ Computer\ Engineering,\ General\ CompE$

- · Working with professor to create new teaching material and lab projects
- · Creating documentation for devices such as 8051 microcontrollers, Xilinx FPGA's,

IT Technician & Developer at Elizabethtown College | Elizabethtown, Pa

February 2017 – May 2018

- \cdot $\,$ Management of all digital signage on campus, on the backend and frontend.
- · Software development needs for signage and other display systems.
- · Video editing for school and departmental needs.

Software Developer at Clair Global (Clair Data Systems)| Lititz, Pa

May 2017 - August 2017

- · Intern software developer for Clair Global creating on the spot software for company needs.
- Projects included: Switch auto-configurator, Interactive panel monitoring networking racks, and VPN data collector.

Network Engineering / IT at **Coventry Christian School** | Pottstown, Pa **Technical Production Director** at **Fairview Village Church** | Eagleville, Pa

2015-2016 2014-2016

Projects

PerfMon | Clair Global

A **Perf**ormance **Mon**itor made for Clair Global to easily monitor the status of a production rack out on a production and send back telemetry data. Primarily written in Node.js to run seamlessly on a Raspberry Pi. Created with a team of 2 people with a full-fledged front end and back end.

Electric Vehicle | Freshman Project

Participated in the research, design, and fabrication of an electric vehicle that would later be benchmarked against my fellow cohort. Performed the duty of team programmer and created custom software for our car that greatly increased the car's performance and longevity

HomeLab | Personal Project

A continuing project in learning more about networking, systems administration, and servers, I have been working on a home networking setup affectionately named JuiceNet. This setup currently includes a self-refurbished HP DL180 G6 enterprise server, a Linksys LGS124 Switch, and a few Raspberry Pi's. It currently holds much of my data, a personal webserver, a media server, private git source, VM tester, a good web development platform and much more.

Skills, Abilities, Other Information

- Languages: C, C++, C#, Bash, Python, VBA, Java, Javascript, Go, HTML/CSS, MATLAB
- · <u>Software:</u> Word, Excel, Inventor, Photoshop, InDesign, Premiere Pro, After Effects.
- Misc. Technology: Network troubleshooting, Linux, Windows, MacOS, Android, and iOS. System Administration (On both Linux and Windows Server), Graphic Design, Video Editing, Hardware Expertise, Web Design, Embedded Systems.

Secret Level Department of Defense Clearance