Clay Buxton

Experience

DevOps Engineer at **greymatter.io** | Remote from Greater Philadelphia Area

Since Jan 2022

- Member of the Product Operations team working with SREs, Customers, and the Product Development team.
- Built customized tools for integration of the Grey Matter platform with customer tools and other CNCF components, to build customer infrastructure in hybrid and/or multi-cloud implementations.
- · **Created resources on customer need** including but not limited to, hardened customized containers, networking configurations, infrastructure architecture, cloud environments, CI pipelines, and development of proof-of-concepts.
- · Communications between internal tooling teams, product development, and customers.
- · Extensive work with Kubernetes, Docker, AWS, Azure, Terraform, Ansible, and more.

DevSecOps Engineer II at **Lockheed Martin** | King of Prussia, PA

May 2020 - Dec 2021

- Internal operations support for a group of ~120 developers. Primary RHEL Admin and DevOps Engineer.
- **Developed and automated CI/CD Pipelines.** Provided builds, hosted repositories, automated testing, static code quality and security analysis in a quick, consistent, and accurate environment on Windows, RHEL and in containers.
- · Architected, implemented, secured, and automated all Linux assets in the environment.
- · Architected Kubernetes and Docker implementations and designed hardened containers based on requirements.
- · Implemented DoD Risk Management Framework for OS hardening and security controls, automated with Ansible.

Systems/Software Engineering Intern at Lockheed Martin & Clair Global

May 2017-April 2020

- Engineering work with Java, C++, GNU Radio on a large, micro-service driven, command and control application.
- · Administration work with Windows, Linux, Unix environments, networking, and more
- Extensive work on **agile teams**, **working with classified material**, **and creating automation systems**.
- Developed telemetry software using **Telegraf, ElasticSearch, InfluxDB and Grafana** to monitor assets in use at live shows and concert venues.

Projects

HomeLab | Personal Project

Since 2016

A continuing project in learning more about networking, security, and DevOps. "JuiceCloud" is a home datacenter running a Kubernetes cluster. JuiceCloud serves as a testing environment for new technologies, a private media server, development server, home automation platform, game host, backups, and cloud file access. Services are used by a small, active group of friends and family. JuiceCloud is a production environment with all services using TLS, with SSO logins and identity management, distributed storage, with load balanced/high availability services. JuiceCloud is segmented from other home traffic using VLANs and firewall rules on enterprise networking equipment.

Cosmic | Senior Project

August 2019 – May 2020

Cosmic is a fully simulated 8-bit computer architecture. The entire architecture and instruction set was created from scratch and works in a rich environment. The environment includes a debugger, a full-fledged GUI and an assembler. Cosmic is hard to explain in words, but better in code: https://github.com/clbx/Cosmic

LoveCube | Personal Projects

July 2020

LoveCube is a wireless message box based off the ESP32 written in C++. I built a circuit that connected notification LEDs and an OLED screen to an ESP32 to display messages that it pulls off a central server. The server is written in Python and uses a MySQL database to store messages sent to it by the users. I also modeled and 3D printed the enclosure that it's housed in. Software and designs are available on GitHub: https://github.com/clbx/LoveCube

Skills & Abilities

Languages: C++, Go, C#, Bash, Python, Java, Swift, SQL, HTML/CSS, JavaScript, TypeScript.

Platforms: Linux, Git, AWS, Azure, Kubernetes, Docker, Terraform, Ansible, CI/CD, Helm, Infra as Code, GitOps, Pulumi

Education & Certifications

Georgia Institute of Technology | Master of Science | Online

M.S. Computer Science. Computational Systems Specialization

3. GPA | May 2023

Elizabethtown College | Bachelor of Science | Elizabethtown, Pa

3.42 GPA | May 2020

B.S. Computer Engineering, B.S. Computer Science

Top Secret Level Department of Defense Security Clearance