# **Clay Buxton**

## **Experience**

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

Since Jan 2022

- · Contributed to design and implementation of a custom service mesh, greymatter, for microservices architecture to enhance reliability, security, and observability of applications.
- Extensive experience with Kubernetes, including setting up and configuring clusters, deploying Greymatter and customer applications, deploying security policies, and troubleshooting production issues.
- Implemented CI/CD pipelines for efficient and reliable development and deployment of Greymatter components, reducing build times and improving reliability, security, and build insights by an order of magnitude.
- · Collaborated with the Product Engineering team to ensure seamless integration of the Greymatter service mesh and customer applications.
- · Designed and implemented infrastructure as code using Terraform and Ansible to create more maintainable and reliable cloud infrastructure.

# **DevOps Engineer** at **Lockheed Martin** | King of Prussia, PA

May 2020 - Dec 2021

- · Managed a large-scale Linux infrastructure, ensuring high availability, performance, and security in a closed, secure environment for a government customer.
- Implemented and maintained a GitLab instance, providing developers with a centralized code platform with CI/CD pipelines for multiple applications, on multiple platforms, streamlining the development process significantly.
- · 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.

# Software Engineer at Lockheed Martin | King of Prussia, PA

May 2018-April 2020

- · Engineering work with Java, C++, GNU Radio on a large, micro-service driven, command and control application.
- · Administration work with Windows, Linux, and Solaris environments.
- · Extensive work on agile teams, working with classified material, and creating automation systems.

## **Current Project Portfolio**

## **Github:** https://github.com/clbx/

#### **HomeLab - Production Services**

Since 2020

A continuous project in learning new technologies and keeping up to date. "JuiceCloud" is a home datacenter running a bare-metal Kubernetes cluster. This environment services as a testing ground for new technologies, a private media server, git server with CI/CD, smart-home automation platform, game server host, cloud file access, and backup server. Services are used by a small, active group of friends and family, which each have their own SSO account specific to JuiceCloud. This environment is treated as a live production environment with all services using TLS, identity management, with distributed storage, and load balanced/highly available services. All running on enterprise hardware segregated from home network traffic using VLANs and firewall rules on enterprise networking equipment

#### **Rex - Full Stack Application**

Since 2022

Rex is an in-development web application and API for identifying, cataloging, and presenting ROM dumps of retro games. Rex is a containerized Go application that given a directory of ROMs, identifies games of supported platforms by parsing the binary and finding the identifying information, then pulls information about the game from supported databases, stores the information in MongoDB and presents the data to a user or frontend using a REST API. Development of Rex can be followed at: <a href="https://github.com/clbx/rex">https://github.com/clbx/rex</a>

#### **Skills & Abilities**

**Languages:** Go, Bash, Python, C++, C, C#, Java **Clouds:** AWS, Azure, GCP **Platforms:** Kubernetes, OpenShift, Docker, Linux **Tools/Software:** Git, Gitlab, Terraform, Ansible, Pulumi, Prometheus, SQL & NoSQL Databases, Vault, Vuln Scanning and Hardening.

**Concepts & Technologies:** Infra as Code, GitOps, Agile, CI/CD, Service Mesh, System Administration, Development Pipelines, Service Mesh. Networking Concepts (DNS, DHCP, TCP/IP), Virtualization (VMWare, KVM).

#### **Education & Certifications**

## **Georgia Institute of Technology** | Master of Science

3.60 GPA

· M.S. Computer Science. Computational Systems Specialization

### Elizabethtown College | Bachelor of Science

3.42 GPA

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

#### **Top Secret Department of Defense Security Clearance**