Troy Liebel

Work Experience

Site Reliability Engineering Consultant - VMware

Sept 2021 - Present

- worked alongside clients to build new and enhance existing Kubernetes and Cloud Foundry application platforms, usually with a focus on automation.
- built a **Python** library that enables **configuration management** integrated with **GitOps pipelines** as a replacement for manual configuration within a GUI.
- constructed a Chaos Engineering test suite that uses Chaos as Code (ChaosToolkit) and CI/CD (Concourse) to produce repeatable and maintainable chaos experiments.

Site Reliability Engineer – ACV Auctions

Dec 2020 - Aug 2021

- enabled hundreds of developers to produce upwards of 75 releases per week by enforcing best practices across several Kubernetes clusters in production, development, and sandbox environments hosted on AWS (Amazon EKS).
- led an initiative to convert existing cloud assets to **Infrastructure as Code (Terraform)** to enable scalability and maintainability for the platform at large.
- streamlined developer release engineering by building an alias for **Helm** within **CI/CD (Jenkins)** that retrieves pod status and logs **(Splunk)** upon failure.

Cloud Engineering Consultant – Stark and Wayne

May 2019 – Dec 2020

- built platforms capable of supporting tens of thousands of developers and hundreds of thousands of applications leveraging Cloud Foundry and BOSH.
- delivered fully documented, scalable, and maintainable platforms using **Infrastructure as Code** (**Terraform**) and **configuration management tools** (**BOSH**, yaml).
- created proof of concept clusters using both fully-managed Kubernetes (Amazon EKS)
 and self-managed Kubernetes (Rancher, RKE) to advise clients on their strengths and
 weaknesses in the context of a platform that must be ready to support hundreds of thousands
 of applications.
- integrated AWS Secrets Manager as an alternative to Kubernetes secrets using a secret injection sidecar that enables teams to manage their own secrets within their separate AWS account's Secrets Manager while pushing apps to a single shared EKS cluster.
- designed and maintained CI/CD pipelines (Concourse) to pull, test, deliver, and deploy new software versions to multiple environments.
- maintained a Cloud Platform Management toolset alongside dozens of other Open Source contributors. This included monitoring the underlying software dependencies to add and sync features as well as building and testing new Platform Management features such as support for external databases (RDS) and secret management (Vault, Credhub).

Software Engineer – The Boeing Company

Jan 2018 – May 2019

- Boeing Commercial Crew Program, Boeing CST-100 Starliner
- verified the spacecraft's flight management software via **Perl** scripts and manual scenario testing to ensure software meets formal quality standards.
- directly assisted team members by creating versatile **Python** scripts to fully automate analysis of extremely large data sets.
- streamlined database organization and **version control** for multiple teams by developing a flexible program with **command line** and **GUI** options that verifies configuration properties and conventions across thousands of files.

Education

BS, Computer Science – University at Buffalo

2013 - 2017

 Computer Science Teaching Assistant – Software Engineering (CSE 442), Intro to Computer Science (CSE 115).