

Troy Liebel

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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.
- configured a shared workload across multiple **Kubernetes** clusters in different cloud providers using an **Istio based service mesh**
- 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, yamll)**.
- 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