

Jeffrey Robert Hammel

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701 26th St.
Oakland, CA 94612

- Monitoring, testing, and deployment of complex systems
 - Expertise in Linux, Kubernetes, AWS, Python, Docker
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Senior Software Engineer - Testing and Automation

August 2022 - present

BrightSign

- Architected + oversaw automated testing for BrightSign digital signage players and associated software and cloud
 - Authored + maintained a headless TypeScript client for outer loop testing of BSN.cloud
 - Helped prototype Kubernetes deployment and Prometheus monitoring stack for realtime monitoring of BSN.cloud health with headless client
 - Maintained + extended device firmware testing framework (in python)
 - Prototyped Ansible deployment of device firmware testing framework to onsite servers
 - Developed CI best practices using Github Actions for Quality Engineering team
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Software Engineer - Infrastructure

October 2017 - July 2022

LeapYear Technologies

- Development and operational support of Infrastructure as Code for a differentially private analytics platform
 - Authorship and development of Kubernetes deployment configurations using Helm and the Carvel tool chain
 - Creation of a monitoring stack for real-time diagnosis of LeapYear software deployments
 - Development and curation of a Terraform and Ansible ecosystem for AWS deployments
 - Development and maintenance of a CI/CD pipelines using Concourse and CircleCI for the creation and testing of container images
 - Scalability and concurrency testing and analysis of results
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Senior Fullstack Engineer

April 2017 - October 2017

EY - Global Innovations

- Creation of an ETL process to synchronize a SQL datastore with a custom AWS data-storage platform via a REST interface using Node.js and PhantomJS
- Integration of AWS and proprietary technologies in support of a data-storage platform for machine learning of corporate tax returns

Technical Lead

August 2015 - February 2017

Cisco Systems

- Implemented Kubernetes deployment of a Concourse CI system for testing and deployment of an on-premise cloud provisioning system (Metal as a Service)
- Operation and extension of a SaltStack-managed control plane for the Infinite Video streaming provider platform
- Implementation of a monitoring system for Infinite Video services using Sensu and including the creation of a headless testing client
- Development of CDN containerized speedtest software for reporting to Elasticsearch

Senior Software Engineer

January 2014 - June 2015

Cognitive Networks

- Authorship of a Python-driven headless client for monitoring and accuracy testing of a distributed video automatic content recognition system for Smart TVs
- Viewership information data pipeline testing. The scope of testing included unit, integration, and end to end tests.
- Development of AWS provisioning of system components using Boto
- Analysis of test result data including A:B experiments

Software Engineer

March 2010 - December 2013

Mozilla - Automation and Tools

- Development and maintenance of automated harnesses for testing and quality assurance of the Firefox web browser
- Curation of Python ecosystem for test driver functionality
- Deployment to a multi-platform Buildbot continuous integration system

Software Engineer

August 2006 - January 2010

Openplans (formerly The Open Planning Project)

- Development of community collaboration web platforms and tools
- Introduced Buildbot continuous integration system and build framework

Graduate Student Researcher, Graduate Student Assistant

August 2001 - May 2006

University of California at Berkeley - Electrical Engineering and Computer Science

- Computational modeling of plasmas and comparison to experimental and theoretical results with a focus on DC discharges
- Conducted classes, prepared lecture material, and grading
- Development primarily in C/C++

Education

Master of Science in Mechanical Engineering *June 2000 - May 2002* **Worcester Polytechnic Institute**

J. Hammel, K. Kovalev, N. A. Gatsonis, "Unstructured Adaptive Monte Carlo Simulations of Flows in Micronozzles", AIAA Paper 2001-2891, presented at the 35th AIAA Thermophysics Conference, Anaheim, CA, June, 2001.

Bachelor of Science in Mechanical Engineering

August 1996 - May 2000

Worcester Polytechnic Institute