

Profile

DevOps engineer with 12+ years building infrastructure automation and CI/CD platforms. Physics graduate with extensive experience in infrastructure-as-code, cloud architecture, and software development. Proven track record designing automation systems from scratch for mission-critical environments including NASA missions.

Experience

NASA Jet Propulsion Laboratory

Pasadena, CA

Technical Group Lead

Aug. 2024 –

• *Lead DevOps Engineer*

Apr. 2021 – Aug. 2024

Senior DevOps Engineer (Contractor)

Jan. 2019 – Apr. 2021

- Providing technical guidance and mentorship to 25 person DevOps group as Lead
- Designed and implemented infrastructure as code frameworks (Puppet, Terraform) used in 10+ NASA missions
- Experience deploying on mission-critical hardware on premises, in the cloud, and in space
- Site reliability and monitoring (Splunk, Zabbix, vCenter, Cloudwatch)
- Penetration testing, cybersecurity auditing, and system hardening
- Docker application development, testing, and deployment (AWS ECS, Fargate)
- Linux server administration and debugging (CentOS/RedHat)

PierPlay

Culver City, CA

• *Senior Software Engineer/DevOps*

Oct. 2016 – Jan. 2019

- Responsible for all client and server build and deployment pipelines (CI/CD, Jenkins, Ansible, Spinnaker, AWS)
- Framework-level software development and design (C#)
- Backend monitoring, alarms, and profiling (PagerDuty, Datadog, NewRelic, AppDynamics)
- Mobile application profiling and optimizing (Unity, Xcode, Android Studio)
- General automation and scripting (Python, Ruby, Bash, Groovy)
- Developed testing frameworks from the ground up for client (Calabash) and server load testing (Locust)

Playtika (Buffalo Studios)

Santa Monica, CA

• *DevOps Manager*

March 2016 – Oct. 2016

DevOps Engineer

Jan. 2014 – Sept. 2016

- Configuration management for several different platforms, environments, and projects (Chef, Vagrant, Docker)
- Infrastructure design and troubleshooting (cloud and on premises)
- Software development and production support
- Continuous Integration and Deployment strategies (Jenkins, Capistrano)
- Process Automation and Refactoring

Buffalo Studios

Santa Monica, CA

• *Build Engineer*

Feb. 2013 – Jan. 2014

- Developing and maintaining build and release scripts (Ant, Jenkins, Python, Adobe AIR, Bash)
- VCS management: branching and merging strategies (SVN, git)
- Database administration (MySQL)

Buffalo Studios

Santa Monica, CA

• *Senior QA Engineer*

Oct. 2011 – Feb. 2013

- Software testing, code auditing (Java, PHP, and ActionScript 3)
- Developing automated test scripts (PHP, Python) and test plans
- Training new and current employees on test methodology and technology

Education

- **University of California, Santa Barbara**

- *Bachelor of Science in Physics*

- Undergraduate research programming microcontrollers for the Martinis Quantum Computing Group, lead by Nobel Prize winner John Martinis.

Skills and Activities

Security Clearance: Active Secret clearance with the U.S. Government

Computer Technologies: AWS (Lambda, RDS, EC2, CloudFormation, Opensearch, ElastiCache, DynamoDB, ECS, S3, IAM), Jenkins, Redis, MySQL, Linux (CentOS/Red Hat, FreeBSD, Debian), Git, SVN, Docker, Podman, Vagrant, Puppet, Terraform, Ansible, Chef, Unity, Xcode

Volunteer Work: One year at East Valley Animal Shelter as a certified dog walker and trainer. Two years at Santa Barbara County Animal Shelter specializing in dog behavior and socialization. Two years with the UCSB Physics Circus- an outreach group that visits local schools (K-12) to give demonstrations and lectures.

Awards and Recognition

- **NASA Jet Propulsion Laboratory**

- 2 Individual Voyager Awards for exceptional contributions and performance above and beyond expectations
- 6 Team Achievement Awards for successful mission milestone completions
- Capture the Flag Pen Testing Competition - 2023: 2nd Place Overall (out of 150+ participants)
- Capture the Flag Pen Testing Competition - 2022: One of 8 participants to fully complete the challenge (out of 150+ participants)