

JAKE ALVES



PROFILE

Infrastructure Engineer with development skills and a diverse information technology background acquired from in-depth training and ongoing experience. Proficient in server configuration, virtualization, network engineering, hardware/software installation, troubleshooting/repair, custom tool development, client relations, and staff training/supervision. Passionate and self-motivated team player/builder. An enthusiastic worker that can quickly grasp new technologies, software, languages, and development practices. Facilitates a team approach to achieve organizational objectives, increase productivity, and enhance employee morale.

	Providence, RI
	(510) 969-9745
	jake@jakealves.com
	linkedin.com/jakealves

WORK EXPERIENCE

SENIOR QUANTUM PLATFORM ENGINEER

ZAPATA COMPUTING INC. / MAY 2020 - PRESENT

- Worked in a paired programming environment applying the best industry standards for code health, scalability, robustness, and mentoring junior Software Engineers.
- Led the design and implementation of an expressive quantum computing language for Orquestra that lies at the intersection of software engineering and quantum computing.
- Supported a DevOps approach where delivery includes all operational work required to deploy and operate the software in addition to development time.

DIRECTOR OF DEVELOPMENT OPERATIONS

SCHOOLZILLA / FEB 2014 - APR 2020

- Maintained Schoolzilla's AWS infrastructure, including both Linux and Windows machines.
- Leverages tools like Terraform, Packer, and Docker follow "infrastructure-as-code" strategies to ensure repeatable processes and allow for flexibility and scaling.
- Implemented monitoring tools like Datadog, ELK, and Prometheus to ensure system reliability and uptime.
- Develop custom tooling to help support, monitoring, and maintain Schoolzilla's infrastructure/platform.
- Performed vulnerability scanning and testing of Schoolzilla environments, responsible for environmental security and configuration hardening.
- Leverages Atlassian products (Jira, Confluence, Bitbucket) to organize and plan work and help follow Agile methodologies.
- Developed and engineered Schoolzilla's microservice environment using CoreOS / Fleet and Rancher / Cattle platforms.
- Was responsible for developing and monitoring Key Performance Indicators (KPI) to ensure infrastructure strategy meets overall company objectives.

LANGUAGES

- Bash
- Python
- Go
- Powershell
- Lua

TOOLS

- Terraform
- Kubernetes
- Concourse
- Jenkins
- MongoDB
- MS SQL
- Redis
- Nginx
- Datadog
- Docker
- Rancher
- Etc

WORK EXPERIENCE CONTINUED

CYBER DEFENSE SPECIALIST

MAINE AIR NATIONAL GUARD / NOV 2006 - AUG 2019

- Develops and maintains tactical information technology networks, systems operations, and product assembly/installation to include disaster recovery, systems security, and hardening.
- Configures, manages, monitors, and troubleshoots various network and application server hardware, operating system software, and peripheral network equipment such as printers, network storage, backup systems & boundary protection (Firewalls/Proxy Servers) for both classified and unclassified networks.
- A vital member of a highly trained combat communications unit, capable of deploying anywhere in the World and providing a full suite of enterprise-grade network communication services within 48 hours of putting boots on the ground.

SYSTEMS ADMINISTRATOR

DELORME / JAN 2012 - FEB 2014

- A vital member of the DevOps Team, responsible for managing DeLorme's inReach web environment that supports their two-way text-messaging global communications device providing 99.99% uptime.
- Leveraged free open source technology to create a scalable event and log management system, capable of handling over 35 million events a day and instantly query-able via an AngularJS web Interface.
- Helped implement and integrate automated deployment tools, allowing the deployment of new releases with a single button click, minimizing downtime, and adding more predictability to the deployment process. (Chef, Octopus Deploy)
- Developed a tool capable of uploading over 100 million map tile images to Rackspace's Cloud Files service to allow faster updates and easier management of DeLorme's custom map engine supporting their inReach service offering.

LEAD INFORMATION SYSTEM SECURITY OFFICER

BAE SYSTEMS / AUG 2008 - FEB 2010

- Provided IT Security administration services for multiple mixed environment Linux / UNIX / Windows networks, securing over 280 classified Information Systems.
- Responsibly initiated/implemented risk mitigation countermeasures.
- Performed weekly security audits and deployed monthly virus/security patch updates on all information systems.
- Developed and implemented an automated auditing tool for the UNIX / Linux environments saving over 6 hours of auditing time per week.
- Developed and tested hardening procedures for CentOS and Red Hat Enterprise, maintaining compliance with Defense Security Service requirements, allowing the operating systems to be used in classified environments.
- Utilized computer forensics techniques to investigate security violations and ensured that discrepancies were maintained correctly and sanitized to prevent unauthorized disclosure of classified information.

CONCEPTS

- Behavioral-Driven Design
- Clean Architecture
- Lean Development
- Agile Methodologies

CERTIFICATIONS

- Security+ Certified (2010)
- Certified Ethical Hacker (2014)