

# JEFF DAVIS

This Resume is maintained using my Resume Operator powered by K8s

Check it out at: <https://github.com/JefeDavis/Resume-Operator>

## OVERVIEW

Passionate Kubernetes Engineer with automation, design, and architecture experience along with strong programming and troubleshooting skills in enterprise environments. Self-motivated with not only a desire to learn, but to lead and teach others as well. Seeking a professionally challenging environment to engage technical and automation skills.

## EXPERIENCE

### VMware Tanzu Labs

📍 Remote

#### SENIOR STAFF SOLUTIONS ARCHITECT

August 2023 - Present

#### STAFF FIELD ENGINEER

March 2021 - July 2023

- Developed open-source tool to convert Kubernetes manifests into fully functional Kubernetes Operators to perform create, update, and delete lifecycles of an application
- Created Golang library to convert Kubernetes Yaml manifests into Golang structs
- Engineered open-source tool to allow overlaying Yaml manifests via Json Path specification
- Designed Golang "marker" lexer using state machine concepts to understand marker comments in Yaml manifests and Golang source code
- Consulted on reference architecture for Tanzu Kubernetes on vSphere

### Epic Systems

📍 Madison, Wisconsin

#### DEVELOPMENT PLATFORM LEAD

June 2020 - February 2021

- Led 4 person Site Reliability Engineer team to maintain Development platform consisting of GitLab SCM, Artifactory artifact management software, Security Controls, and Kubernetes Platform
- Lead Architect for Infrastructure as Code technologies and auto enforcement strategies for Epic Hosted platform
- Advisor for Container Strategies across Epic systems Portfolio
- Engineered CI/CD pipeline for 12 languages; allowed automated testing, documentation, building, packaging, and deployment for 200+ developers
- Designed and taught introduction to development courses for new staff; provided common terminology and framework for getting started with git and on-ramp for new developers.
- Blueprinted centralized GraphQL service to combine disparate data into single endpoint; delivered single source of truth to integrate customer, provisioning, and environment information into automation.

#### VIRTUALIZATION DEVOPS ENGINEER

July 2018 - June 2020

- Developed containerized risk-aware desired state configuration application suite to configure virtual infrastructure; delivered automated consistency and standardization of 60+ vCenters, 38K+ VMs, 3.4K hosts
- Champion for automating processes throughout organization; lead automation developer, SME for PowerShell, Golang, and Container design discussions.
- Lead Team Code Reviewer, analyzed code from 6+ different languages to provide feedback, test for bugs, and mentor on how to create scalable, optimized, and readable code
- Developed automated end-to-end VM provisioning process; reduced deployment time by 80%
- Instituted standardized Module and API Server Frameworks allowing for standard, consistent and faster startup time for new developers.



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🌐 <https://linkedin.com/in/JefeDavis>

🔗 <https://github.com/JefeDavis>

📍 South Carolina

## CORE COMPETENCIES

- Virtual and Container technology design, implementation, and troubleshooting
- Deep understanding of underlying data center concepts and theories
- Expert on Automating problems to remove roadblocks and ease operational overhead
- Productivity in high pressure situations
- Analytical thinking
- Written and oral communication
- Confidence briefing executive staff
- Datacenter design & architecture
- Experienced traveler

## SKILLS

**Programming:** Golang, PowerShell, Python, Docker, Helm, GraphQL, Yaml, Bash, HTML (including Jinja), Javascript, CSS, SCSS

**Developer Tools:** Git, Gitlab, Github, Gitlab CI, Github Actions  
**Infrastructure-as-Code:** Terraform, Puppet, Ansible

**Container Orchestration:** Kubernetes, Docker Swarm, OpenShift

**Serverless:** Knative, OpenFaas

**Monitoring:** Prometheus, Grafana, Splunk

## 691st Cyber Operations Squadron, USAF

Ramstein AB, Germany

### SENIOR STORAGE AND VIRTUALIZATION ENGINEER

June 2014 - June 2018

- Designed and Deployed vSphere 6.5 architecture at 6 data centers and 22 branch offices across 10 countries
- Acted as chief technical advisor in support of data center deployments, upgrades and optimizations.
- Engineered/automated \$89M standardized enterprise virtual infrastructure platform sustaining 133 virtual suites
- Coordinated Air Force Life Cycle Management Center/industry support; Developed best practices for both classified and unclassified networks, standards, and configurations for enterprise employment
- Administered 1300+ virtual/backup servers on \$10B enterprise network supporting 46K users at 7 data centers/114 branch offices
- Designed content replication architecture to provide standardized VM deployment capabilities across 29 sites decreasing deployment time 90%
- Developed automated means of network deployment ensuring standardized and rapid deployment of new data centers
- Collaborated with VMware, Dell, and Microsoft Personnel to develop turn-key enterprise solutions for deployment on the Air Force Network

## 20th Communication Squadron, USAF













Shaw AFB, South Carolina

### NETWORK SECURITY LEAD

August 2009 - June 2014

- Oversaw preventive and restorative measures on 57 servers and terminal equipment supporting a \$1.9M network with 9.6K users
- Operated cryptographic equipment for base distribution point and defense communications systems equipment
- Directed implementation of national, Department of Defense & Air Force network security policies & directives
- Oversaw operation and maintenance of local firewalls and proxy servers to protect base information resources
- Performed network security assessments to minimize virus threats, malicious logic and software vulnerabilities

## PROJECTS

 <b>Operator-Builder</b>	 <b>Yaml-Overlay-Tool</b>	 <b>Gener8s</b>
A Kubebuilder plugin to accelerate the development of Kubernetes operators	Use JSONPath to query & patch YAML files with ease.	Utility for generating various Kubernetes items
 Go	 Go	 Go
 <b>Yaml-Jsonpath</b>	 <b>Resume</b>	 <b>Resume-Operator</b>
JSONPath implementation for the gopkg.in/yaml.v3 node API	My personal resume powered by hugo and kubernetes	Kubernetes operator to build & host my resume, powered by operator-builder
 Go	 SCSS	 Go

## CERTIFICATIONS

- [VMware Certified Professional - Data Center Virtualization 2020\(VCP-DCV\)](#) (December 2020)
- [VMware Certified Implementation Expert 6 – Data Center Virtualization\(VCIX6-DCV\)](#) (December 2016)
- [VMware Certified Advanced Professional 6 – Data Center Virtualization Design\(VCAP-DCV-Design\)](#) (December 2016)
- [VMware Certified Advanced Professional 5 - Data Center Virtualization Deploy\(VCAP5-DCV-Deploy\)](#) (July 2015)