DAVID **FRIES**

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I am a highly motivated, versatile IT/DevOps Professional with backend development experience. I love building at-scale, efficient systems based around cloud-native fundamentals.

EDUCATION

DECEMBER 2020
B.S. COMPUTER SCIENCE, UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE
Cybersecurity concentration

MAY 2017
ASSOCIATE OF SCIENCE: SOFTWARE, SYSTEMS, NETWORKING, CENTRAL PIEDMONT COMMUNITY COLLEGE

ASSOCIATE OF ARTS, CENTRAL PIEDMONT COMMUNITY COLLEGE

SKILLS

- Gitlab CI/CD Pipeline building
- Application reverse-engineering
- Backend development (Python/Flask, Typescript/Express, SQL, EdgeDB)
- Infrastructure as Code (Pulumi, Terraform)

- Hybrid infrastructure management
- Containerized application deployment
- SDN/VPN technology
- Enterprise networking

CERTIFICATIONS

- AWS Certified Solutions Architect Associate (March 2022)
- AWS Certified Developer Associate (April 2022)
- AWS Certified SysOps Administrator – Associate (May 2022)

EXPERIENCE

NOVEMBER 2023 – JANUARY 2024

SENIOR SYSTEMS ENGINEER THE HOME DEPOT (CONTRACT)

- Re-factored Terraform modules (consolidation, grouped repos).
- Helped support a distributed system handling ~10 billion requests a month (99.99995% SLA)
- Worked with K8s, Envoy, Grafana (OSS and Cloud), Prometheus, and GCP.
- Developed custom Python scripts and Github Actions for validating, promoting, and deploying Grafana dashboards based on dev, non-prod, or prod lifecycles.
- Worked with fellow engineers to troubleshoot a mix of Systemd, Flatcar Linux, FRR, and GoWatchdog.

JULY 2022 – OCTOBER 2023

DEVOPS ENGINEER STATELESS

- Heavily worked with Pulumi, Typescript, and all major cloud providers (Azure, GCP, and AWS).
- With Pulumi Infrastructure as Code, I worked on a custom deployment platform for our services, writing dynamic resource providers for bespoke APIs, and creating many custom resource components for various pieces of our infrastructure.
- Helped maintain a custom fork of the Megaport Terraform Module
- Helped create novel software defined networking products centered around cloud networking automation and datacenter networking/connectivity.
- Worked on implementing our RESTAPI for our SaaS offering, all written in Typescript, Express (Zodios), and EdgeDB. The API client for the frontend team to use was then built and deployed with Gitlab CI/CD.
- Created various complex Gitlab CI/CD pipelines for deploying software, building docker images, or creating our main product stack.
- Implemented an observability stack of Grafana, Thanos, and Loki for processing our application logs/distributed system performance
- Maintained software deployments for our SaaS offering which ran on a cloud provider's respective Kubernetes engine.
- Helped troubleshoot and maintain high-performance bare metal Kubernetes clusters which ran our custom software defined networking solution; this included white-box Mellanox (Nvidia) switches, containerized FRR, and a lot of BGP config templating.

NOVEMBER 2021 – JULY 2022

SITE RELIABILITY ENGINEER, BLUE SENTRY CLOUD

- Worked with remote team providing incident response, service request resolution, and cloud-transformation projects for clients.
- Provided 15-minute SLA response when on-call.
- Used Terraform heavily when creating/modifying client infrastructure.

- Assisted with ad-hoc client projects, ranging from automation tasks and documentation to architecture recommendations and security best-practices.
- Used Agile methodology when working with clients.
- Maintained client's Kubernetes infrastructure running on bare-metal and EKS.
- Hands-on with the following AWS services: EC2, RDS, EKS, S3, Lambda, ASGs, LBs, QuickSight, IAM, CloudFront, Route53, VPC Peering, and Step Functions.

MAY 2015 – NOVEMBER 2021
CLOUD NETWORK ADMINISTRATOR, US GREENFIBER

SOFTWARE DEVELOPMENT:
- Used Python to create a custom integration between our accounting software and a critical SaaS.
- CI/CD pipeline built with Gitlab to deploy our microservices to Kubernetes.
- Created an external API to synchronize data from a SaaS to our accounting software via SQL and custom modules.
- Implemented custom report dashboards with Python(Flask), Vue.js, and SQL.
- Automated various IT tasks such as employee on-boarding/off-boarding, paperless accounting batches audits with either PowerShell or Python depending on the required task.

SYSTEMS ADMINISTRATION:
- Windows Server 2008 R2, 2016, 2019
- MSSQL 2008-2016
- Docker, Kubernetes, Ubuntu Server
- Managed/organized a 20+ year old Active Directory environment.
- Citrix Cloud platform, Citrix XenApp 7.x