rjferguson21@gmail.com 256-323-1264

PROFILE

Empathetic software engineer with 15 years of experience, including 10 years developing end-user applications and the last 5 building platforms that empower developers in mission-critical government agencies. First-hand challenges building software at NASA cultivated a passion for building secure, scalable, and maintainable software that has an outsized impact.

SKILLS

Kubernetes, Istio, Helm, Keycloak, OAuth/OIDC, Kustomize, Zarf, NodeJS/TypeScript, Go, Python, Bash, Angular, PostgreSQL, Kyverno, Grafana, Keycloak, Terraform, Gitlab, AWS, GCP Elasticsearch, MongoDB, MQTT

RELEVANT EXPERIENCE

Platform Engineer (Secret Clearance) - Defense Unicorns (Remote / Colorado Springs, CO)

February 2022 - January 2025

Maintainer of UDS Core, Defense Unicorns FOSS secure runtime Kubernetes platform

- Honored to contribute as an engineer on the Platform Big Bang team, rising to the lead of the core security team
- Worked extensively on UDS Core's Kubernetes operator to turn the pain points of integrating with a platform like Big Bang into automation
- Responsible for implementing UDS Core's seamless application single sign on, creating a turnkey AuthN/AuthZ mechanism orchestrated by the Kubernetes operator

Cloud Native Engineer - MRI Technologies (Remote / Houston, TX)

November 2018 - December 2022

Platform engineer developing cloud native software solutions for NASA.

- Core engineer for APPDAT, NASA's Cloud Native Kubernetes platform, providing both technical contributions as well as architectural guidance
- Rebuilt and modernized NASA's public research repository, https://ntrs.nasa.gov which currently services 8 million requests per day
- Migrate workloads to cloud native architecture, providing technical support implementing DevSecOps solutions for greenfield and legacy applications

Senior Software Engineer - DecisionSource (Franklin, TN)

January 2018 - October 2019

Worked as a consultant, integrated in client teams providing development support and cloud architecture direction

- Performed architectural and security audits of customer applications
- Mentored junior developers, providing insight and influence to direct development

Senior Developer - Concert Genetics (Franklin, TN)

January 2013 - January 2018

I worked as a full-stack developer, creating web applications used in the ordering of genetic tests, primarily as a core contributor and engineering product owner for our clinician web portal.

- Managed engineering plan and implementation for 2018 company relaunch of customer-facing products
- Designed and implemented an application for data analysis on data sets of up to 10 million insurance claims backed by Elasticsearch/NodeJS

Design Engineer - Adtran Inc. (Huntsville, AL)

August 2010 - January 2013

I was a developer on Adtran's Network Management team that focused on developing applications used in monitoring and management of Adtran's enterprise network equipment. My main focus was rewriting the existing front-end into a modern web application using ExtJS/PHP.

EDUCATION

B.S. Computer Science, Tennessee Technological University

Cookeville, TN

INTERESTS

Ultimate Frisbee, Mountain Biking, Microcontrollers, Home Automation, Kayaking, Photography, Fishing poorly