

Adam Ferguson

Senior Software Engineer

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PROFILE

Senior software engineer with 15+ years in full-stack web development, cloud/DevOps, and machine learning. Comfortable owning systems end to end — architecture, deployment pipelines, ML model services, and the web apps that use them — with a bias toward simple, reliable solutions.

SKILLS

Languages

Go, Python, TypeScript / JavaScript, Ruby, SQL

Cloud & DevOps

AWS, Google Cloud Platform, Kubernetes, Helm, Terraform, Docker, CI/CD (GitHub Actions, Jenkins)

Backend & APIs

Node.js / Express, Ruby on Rails, FastAPI, GraphQL, REST, PostgreSQL

Frontend

React / Redux, TypeScript, HTML / CSS

Data & ML

Pandas, scikit-learn, XGBoost, PostgreSQL / Redshift, Data pipelines

EXPERIENCE

Senior Software Engineer · Delta Bravo Jul 2020 – Present
Startup delivering machine-learning solutions to manufacturing clients.

- Built ML models (Pandas, scikit-learn, XGBoost) to optimize manufacturing processes.
- Shipped web apps to visualize model predictions (React, FastAPI, Hasura, PostgreSQL).
- Owned deployment: Helm charts, Terraform modules, and CI/CD on Kubernetes.

Senior AI Developer · Ally Financial Aug 2019 – Jun 2020
DevOps and service development for AI features in online banking.

- Built CI/CD for multiple AI services — Terraform for AWS, Helm for OpenShift, Jenkins.
- Led adoption of Rasa as the core of Ally's chatbot platform.
- Developed and tested AWS Lambda functions for the existing Lex-based bot.

Senior Software Engineer · InVue Security Inc.

Apr 2017 – Aug 2019

Hardware- and software-based retail security solutions.

- Led 'Access Manager': React + Node.js/Express/PostgreSQL, a Java app server, and a native Android setup app; provisioned to GCP.
- Led 'Insight', a compliance reporting app: React/Redux + Node.js, with serverless device comms.
- Owned features, performance work, and sysadmin for 'Microsigns' (Node/PostgreSQL, AngularJS).

Data Engineer / App Dev Consultant · Ferguson Software Services (Mood Media)

Jan 2015 – Mar 2017

Systems integration, ETL, and web application development.

- Integrated multiple internal systems via ETL (Python, SQLAlchemy).
- Migrated a data-warehouse solution from MongoDB to Redshift.
- Built and maintained several Ruby on Rails apps with React/Backbone frontends.

Web Development Consultant · Ally Financial (OpenSystems) Aug 2014 – Jan 2015**Senior Software Engineer** · Technekes / Connexiolabs

Feb 2013 – Aug 2014

Senior Software Developer · Mood Media / Muzak LLC

Jul 2011 – Feb 2013

EDUCATION

Economics · Virginia Tech — Masters - NSF IGERT Fellow

May 2004 – May 2006

Economics & Business Information Technology · Virginia Tech — Bachelors

Aug 2000 – May 2004

AWARDS

- Outstanding Senior in Economics - Class of 2004 — Virginia Tech Economics Dept. (May 2004)