# **Matt Fergoda**

Seattle, WA (open to remote) | +1 (650)-483-3421 | matt.fergoda@gmail.com | mattfergoda.me | linkedin.com/in/matt-fergoda/ | github.com/mattfergoda

I'm a software engineer with extensive machine learning experience who enjoys working across the stack. I'm looking for roles where I can leverage my experience building and deploying AI and ML models to build product features that wow customers.

#### **TECHNICAL SKILLS**

Languages: Python, Javascript, SQL, HTML, CSS Frameworks: Express, Flask, Django, FastAPI, React

Cloud: AWS. Azure

Machine Learning / Data Science Tools: pandas, NumPy, Sci-Kit Learn, XGBoost, Tensorflow

# **RECENT PROJECTS**

# AI-Powered Semantic Image Search API

February 2024

Live Demo | GitHub (Frontend) | GitHub (Backend)

- Built a RESTful API that leverages OpenAI's CLIP model and a vector store in PostgreSQL to quickly search across 25,000 images based on their content using plain language.
- Containerized and deployed on an AWS ECS cluster with load balancing.

## Announcement Feature for Student Management System

Dec. 2023

- During a full stack engineering bootcamp, designed and developed an announcement notification feature in Django and PostgreSQL to allow staff to post notifications to subsets of students in the student information system, which is white labeled to external customers.
- Maintained 100% code coverage for all new features.

#### **EXPERIENCE**

### **Professional Development**

Sept. 2023 - Jan. 2024

Rithm School Full Stack Engineering Bootcamp

San Francisco, CA (Remote)

- Attended a full-stack software engineering bootcamp to expand my engineering skill set in web development.
- Built RESTful APIs and dynamic front ends with extensive unit and integration testing.

**Data Scientist** Aug. 2022 – April 2023

Advata Bellevue, WA

- Researched and developed an unsupervised learning algorithm in Python and Databricks for helping customers find common causes of healthcare denials, replacing a third-party service and saving our company \$7,000 per month.
- Deployed the aforementioned unsupervised algorithm into UAT and production, owning post-production maintenance of the service including training new users and incorporating user feedback for ongoing algorithm improvements.
- Presented the latest results of my work in biweekly sprint demos to our company's engineering org. to enhance cross-team collaboration.
- Wrote and maintained wiki-style documentation for each solution I developed.
- Worked according to Agile methodology.

**Data Scientist** May 2021 – July 2022 Bellevue, WA

Valence Consulting (now Kopius)

- Developed machine learning (ML) models in Python and Databricks for finding the root causes of healthcare claim denials for customers across 13 health systems nationally affecting billions of dollars of customers' annual revenue.
- Used Azure Databricks and Azure Data Factory to build and maintain ETL and ML pipelines for increased scalability, data versioning, and easy integration with ML development workflows.

**Data Scientist**Aug. 2018 – April 2021

Hitachi Consulting

Bellevue, WA

- Developed classification models in Python and R for detecting events in a video feed using classical ML methods for super-fast computational speeds on edge devices.
- Prototyped a classification model in Python and Databricks for predicting potentially dangerous inputs to a manufacturing process, allowing for engineers on the shop floor to take appropriate action to prevent a machine failure.

#### **EDUCATION**

Rithm School 2023

Full Stack Web Development Bootcamp

**University of Puget Sound**Bachelor of Science, Physics, Summa Cum Laude

2014-2018

Tacoma, WA