



# Patrick Dwyer

Data Scientist with 2 years of experience in cloud-based data engineering and front-end development. Proficient in designing, developing, and maintaining scalable systems across AWS, Azure, Fabric, and GCP. Strong expertise in Python, Javascript, CSS, HTML, SQL, and Terraform, with hands-on experience building data pipelines, containerized applications, CI/CD workflows, interactive web applications & reports, and more. A fast learner with a problem-solving mindset, passionate about practical applications of technology. Google Cloud Certified Professional Machine Learning Engineer.

## Experience

### Manifold Group: *Data Scientist*

October 2023 – Present

- Optimized client stored procedures decreasing query time by 99.8% to enable ingestion of > 100GBs of data
- Developed and maintained data pipelines to ingest and process > 1TB of data from a client's database into a data lakehouse in Microsoft Fabric
- Designed and implemented enterprise-level data solutions for a Fortune 500 client using Python, SQL, and Microsoft Fabric
- Managed reporting QA process for a Fortune 500 client
- Led implementation of historical report migration project from on-premise to Microsoft Fabric for Fortune 500 client
- Worked in a team setting to develop terraform resources and design networking for a data lakehouse architecture on Azure
- Designed and developed anomaly detection application (Python, Docker, AWS EC2)

### Websanity: *Web Developer*

September 2023 – Present

- Freelance Web Developer for Rulepop, an emerging rules reference platform for tabletop games
- Implemented and maintaining Javascript features on an as needed basis

### Schwartz Lab: *Lab Tech*

July 2023 – Sep 2023

- Developed supervised 3d Convolutional Neural Network in PyTorch
- Manually labelled 8,544 ground truth 2d points to ensure model accuracy

## Projects

### [cwmdc.patrickdwyer.com](http://cwmdc.patrickdwyer.com)

Winter 2025-Present

- Responsive CWD sampling results dashboard built with MDC's public ArcGIS API

### [patrickdwyer.com](http://patrickdwyer.com)

Summer 2023-Present

- Responsive CV website built with industry best practices using vite & vanilla html/css/js
- Integrated offline PWA functionality using vite-pwa-plugin

### [LLVM Compiler \(Class: Compiler Construction\)](#)

Winter 2022

- Built an LLVM → Assembly compiler in C++

## Education

### **BA: Mathematics, Computer Science**

Sep 2019 – June 2023

Northwestern University, Evanston, IL — Weinberg College of Arts and Sciences — 3.43/4.00 GPA