



# Patrick Dwyer

Data Scientist with 2 years of experience in cloud-based data engineering and machine learning. Proficient in designing, developing, and maintaining scalable systems across AWS, Azure, and GCP. Strong expertise in Python, SQL, and Terraform, with hands-on experience building data pipelines, containerized applications, and CI/CD workflows. A fast learner with a problem-solving mindset, passionate about data engineering.

## Experience

### Manifold Group: *Data Scientist*

October 2023 – Present

- Worked in a team setting to develop terraform resources for a data lakehouse architecture on Azure
- Designed networking surrounding a [Synapse](#) based data lakehouse on Azure in a team environment
- Built CI/CD pipeline for containerized anomaly detection application (GitLab CI/CD)
- Built a containerized Azure Durable Function App to run [dbt-core](#)
- Built and presented pipelines and classification models using [Vertex AI](#) to new clients
- 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

## Tools & Skills

### Tools

Azure—Function App, VM, [Synapse](#), Data Factory, Storage, [ADLS2](#)  
AWS—ECR, RDS, S3  
GCP—Vertex AI, BigQuery, Storage  
Postgres, Docker, [dbt-core](#), git, GitHub Actions, GitLab CI/CD,  
Python, SQL, Javascript, CSS, HTML, Bash

### Skills

Communication, Translating complex technical concepts, Presenting, Working in a team environment, Problem solving, Programming, System Design, Analysis, Modeling & machine learning

## Education

### BA: *Mathematics, Computer Science*

Sep 2019 – June 2023

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

## Projects

### [patrickdwyer.com](#)

Summer 2023-Present

- Responsive CV website built from scratch using no pre-built libraries and industry best practices
- Integrated offline PWA functionality using [vite-pwa-plugin](#)

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

Winter 2022

- Built an LLVM→Assembly compiler in C++