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# **Tyler Cross**

## **Machine Learning Engineer**

Personal Site: tylercross.me github.com/tylermarcuscross linkedin.com/in/tyler-cross192

Machine Learning Engineer with a unique background transitioning from direct patient care as an EMT to building end-to-end ML systems in healthcare. Passionate about leveraging predictive modeling, data systems, and machine learning to solve complex human-centered problems, combining technical expertise with deep understanding of end-user needs.

#### **SKILLS**

Tools & Languages
Platforms & Services
Libraries & Frameworks

Python, TypeScript, SQL, React, Firebase, R, Git, dbt, Docker, Kubernetes, Spark Google Cloud Platform (GCP), AWS, Azure, BigQuery, Looker, Snowflake, Databricks scikit-learn, XGBoost, PySpark, PyTorch, TensorFlow, pandas, NumPy, FastAPI, Node.js

#### **EXPERIENCE**

**Data Analyst** *Ophelia Health* 

May 2023 — Present

Brooklyn, New York

- Lead ML developer for clinician availability and capacity management. Designed prediction algorithms using XGBoost/scikit-learn to optimize provider availability across all appointment types. Engineered full-stack solution (TypeScript, Python, BigQuery, dbt) integrating with third-party scheduling API.
- Lead data engineer for asynchronous visit scheduling transition. Developed Python/dbt pipelines and collaborated on TypeScript backend services. Implemented intelligent capacity balancing system for 8,000+ patient routing.
- Architect of financial reporting and claims processing systems. Built comprehensive dbt/LookML infrastructure for financial reporting. Partnered with engineering to automate Candid Health claims submission.
- Lead developer for provider utilization analytics platform. Architected ETL pipeline combining Python, dbt, and LookML for real-time provider insights. Implemented complex SQL logic for patient attribution and visit metrics.

**Care Coordinator** 

Ophelia Health

Nov 2021 — May 2023

Brooklyn, New York

- Lead pharmacy network optimization initiatives while serving in patient-facing role supporting clinicians in delivering comprehensive care. Leveraged SQL and Google Maps to plot all patients and pharmacies, creating a predictive model for pharmacy quality.
- Promoted to care team leadership, executing strategic workforce planning with COO and director through 30% reduction in force while building predictive models for patient growth and establishing company's first structured discharge process.

#### **Emergency Medical Technician**

GEM Ambulance & MSHVFAS

Feb 2017 — Aug 2022

Totowa & Millburn, New Jersey

- 911 EMT responsible for both emergent and non-emergent calls within New Jersey, Pennsylvania, and New York. Managed hundreds of COVID-19 positive patients, averaging 3-5 per day, during the height of the pandemic.
- · Worked intimately with fire, police, paramedic, and emergency room services to deliver patient care.

Consultant

Jun 2019 — Dec 2019

Milan, Italy

LifeSciences Consultants

- Quantitative analyst of insurance claims data, epidemiology, and prescribing patterns. Facilitated go-to-market strategies for rare disease treatments utilizing cell and gene therapy.
- Led market adoption planning across U.S., Canada, U.K., and European markets for clients including Celgene, Roche, Takeda, and bluebird bio. Reported directly to global managing partner and European office principal.

### **EDUCATION**

MS, Data Science, University of California, Berkeley, GPA: 3.94

Aug 2023 - Present

• Relevant coursework: Machine Learning at Scale, Machine Learning Systems Engineering, Applied Machine Learning, Statistics for Data Science, Natural Language Processing with Deep Learning

BA, Philosophy, Cornell University, GPA: 3.95

Jan 2020 — May 2023

• Selected coursework: Decision Theory, Epistemology, Philosophy of Language, Modern Philosophy, Hellenistic Philosophy, Big Data on the Social World

#### **ACTIVITIES**

Treasurer of Watermargin Cooperative Treasurer of Fanclub Collective

Sep 2021 — May 2023

Sep 2020 — May 2022

Other interests: Aquariums / Terrariums, Music Production, Volleyball, Interior Design