# Zach Phelps

 $Stanford, CA \mid zach@zachphelps.com \mid linkedin.com/in/zachphelps \mid github.com/zphelps \\ \textbf{Education}$ 

Stanford University, BS in Computer Science + Artificial Intelligence

Sept 2022 - June 2026

#### Relevant Coursework

Algorithms | Data Structures | Machine Learning | Reinforcement Learning | Natural Language Processing | Information Retrieval | Operating Systems | Cross-Platform Mobile App Development | OOP Sytems Design

# **Experience**

## Software Developer (Part-time), Chrysalis Global – Indianapolis, IN

April 2025 – Present

- Shipped a time-tracking & resource planning software that integrates seamlessly with QuickBooks Desktop; adopted company-wide.
- Launched new company website (chrysalisglobal.com).

# Software Engineering Intern, Acorns - Irvine, CA

June 2025 - Aug 2025

- Architected an RBAC system to streamline the development of micro-frontends for Acorns' Admin Portal.
- Contributed to an internal React component library to unify UX and accelerate MFE development.
- Implemented a service worker to instrument cross-MFE usage analytics for the Admin Portal.

## Software Engineering Intern (AI Team), SEP - Indianapolis, IN

June 2024 – Aug 2024

- Built data ingestion & training pipeline for a time-series classification model which identifies anomalies in hydraulic fracking gun perforating systems. Achieved >90% model accuracy.
- Led frontend development of an internal LLM sandbox using open-source LLMs hosted on-premises, enabling secure conversations with company and client data.

# Software Developer, Central – Los Angeles, CA

May 2023 - Sept 2023

- Led development of startup's mobile (Flutter) and web (React) applications which offered field management services tailored to the mobile waste compaction industry.
- Trained an image classifier to estimate industrial bin compaction levels from servicing photos.

Data Science Intern, Honely: Real Estate Predictive Analytics – Remote

June 2022 – Sept 2022

• Built a lead-gen web-scraping tool targeting criteria such as geographic region and business type. 1000+ leads generated.

# **Skills**

**Languages:** Python, TypeScript, Java, C++, Dart, SQL

Frameworks & Libraries: React, React Native, Next.js, Flutter, PyTorch

Databases: MongoDB, Firebase, DynamoDB, PostgreSQL

Platforms: Google Cloud Platform, Docker, Figma

# **Projects**

# Formula 1 Podium Prediction | Python, scikit-learn, PyTorch, matplotlib

• Trained LogReg/RF/XGBoost/NN models on historical race data; best model (XGBoost) reached 54.2% winner accuracy and 0.94 ROC AUC.

## PII Redaction with Lightweight Fine-tuned LLMs | Python, PyTorch, Unsloth, Faker

• Synthesized datasets and fine-tuned BERT and Llama-3.2-1B for detection/redaction of 10 PII types; achieved 99.3% accuracy (Llama) and 97.2% (BERT).

#### EngScribe: PDF Ingestion and Search Web Tool | Next.js, GCP, TypeScript, PostgreSQL, Stripe

• Developed web application to view, merge, tag, and semantically search long (500+ page) PDF documents with both handwritten and typed text, solving a major pain point for VEX Robotics teams.

## Get Up Park: Student Engagement Mobile App | Flutter, NoSQL, GCP, Figma

• Launched a campus app for news/scores/clubs/menus; ~250 DAU and >90% student adoption.