

# Ethan Cavill

ethancavill@gmail.com | +64 420 813 266 | U.S. / Australian Citizen

[linkedin](#) | [github](#) | [portfolio](#)

## Experience

### Founder, AI Chat and Image Generation Platform

Mar 2024 - Present

*Full Stack Engineer & Founder*

San Francisco, CA

- Built generative AI platform with Laravel and Next.js; **scaling to 10k unique daily visitors and growing.**
- Led product design, research, and full-stack development across all features.
- Engineered image/video generation workflows; **trained LoRAs from constructed datasets.**
- Developed **real-time analytics dashboard** for user behavior insights.
- Managed hiring, marketing, and operations.

### Tangible AI

Oct 2023 - Jan 2024

*Machine Learning Engineer Intern*

San Diego, CA

- Built open-source BERT search engine, **achieving 88% improvement** in recall over comparative TF-IDF engine.
- Presented information retrieval findings to **30+ attendees** at **San Diego Python User Group**.
- Proofread and **published edits** to '**Natural Language Processing in Action**'.

### Adelaide MRI

Jul 2021 - Oct 2023

*Full Stack Software Engineer*

Adelaide, SA

- Developed patented radiology reporting software with Angular, Flask, and ML; **boosting output 2-4x**.
- Automated invoicing with MediPass payment **API and webhook integration**.
- Wrote **integration/unit tests with PyTest (90%+ coverage)** and E2E tests with Cypress.
- Built patient booking system with React, GCP, and FastAPI; **reduced call burden by 50%**.
- **Managed large codebase version upgrades** and refactored business critical components.
- Led frontend migration from React to Angular, improving maintainability.
- Implemented strict linting/compiler settings; **reduced Sentry errors by 30%**.

## Projects

### deepworktimer.io | Next.js, FastAPI, PostgreSQL, Redis, Docker, AWS

- Streak-based productivity system with **distributed microservice architecture** using RabbitMQ/Celery.
- Containerized deployment with Docker; secure session management with Redis and PostgreSQL.

### devarity.com | PHP, MySQL, Bootstrap, JQuery

- Developed an e-commerce platform **launching with 50+ titles** and partnerships with four indie publishing studios.

### ethancavill.me | Next.js, Tailwind CSS, Framer Motion, MDX, Vercel

- Developed a portfolio website with React and Markdown to showcase projects, services, and written insights.

## Skills

**Languages** Python, JavaScript, TypeScript, GoLang (Go), PHP, SQL, HTML/CSS, Bash

**Technologies** React, Angular, Next.js, Redux, Zustand, RxJS, Docker, Linux, Flask, FastAPI, Django, Laravel, PostgreSQL, MongoDB, Redis, Celery, RabbitMQ, PyTorch, ComfyUI, PyTest, Cypress, Sentry, Selenium, Grafana, GCP, AWS

**Concepts** Full-Stack Development, Frontend Development, Backend Development, OOP, Functional Programming, Systems Design, Reactive Programming, State Management, Technical Writing, Agile, Scrum, Algorithms and Data Structures, Machine Learning, Data Science, Distributed Systems, REST, GraphQL, Integration Testing, Unit Testing, End-to-End Testing, Version Control, Git, CI/CD, DevOps, Observability

## Education

### Bachelor of Mathematical Sciences (Incomplete)

Mar 2017 - Nov 2018

*University of Adelaide*

Adelaide, SA

- Coursework in linear algebra, calculus, and algorithms foundational to CS and ML.
- Left to pursue software engineering career.