Ethan Cavill

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github in linkedin

Education .

Bachelor of Mathematical Sciences

Jul 2022 - Dec 2023

University of Adelaide

Mar 2018 - Jun 2020

Bachelor of Economics and Finance (deferred)

2010 - Juli 2020

Adelaide, SA

University of Adelaide

Adelaide, SA

International Baccalaureate (Years 11-12)

Jan 2014 - Nov 2016

St Peter's College

Adelaide, SA

San Diego, CA

Skills _

Programming Languages Python | Java | C++ | C | C# | JavaScript | MATLAB | Simulink

Technologies AWS BS/EC/EC2/ELB | Azure AD | Docker | React.js | Flask | Redis | Spring | Android | ROS

Experience _

Owner Mar 2024 - Present

Clai Studios

• Established a development studio dedicated to creating advanced solutions for medical clinics.

Focused on building SaaS products and utilizing AI to improve clinic efficiency and workflow.

ML/Python/DS/NLP Engineering Intern

Oct 2023 - Jan 2024

Tangible AI

San Diego, CA

- Applied machine learning and data science tools to learn natural language processing (NLP).
- Built a sequence-to-sequence neural network translator from scratch using numpy, PyTorch, and pandas.
- Final project: Developed a vector-based search engine utilizing TF-IDF and BERT.
- Technologies used: Joblib, numpy, pandas, scikit-learn, sentence-transformers, spaCy.

Full Stack Engineer

Jul 2021 - Nov 2023

Adelaide MRI

Adelaide, SA

- Developed a suite of software products to support clinical practice.
 - A radiology reporting system, RadReport, significantly improving report accuracy, detail, and throughput through data and image analysis.
 - Worked on additional projects including employee rostering, patient management, invoice management, web configurators, and booking systems.
 - Technologies used: Angular, RxJS, Docker, Redis, Flask, React, SQLAlchemy, Celery, PyTest, Cypress, Sentry, Jinja, Postgres.

Notable Projects

Deep Work Timer

Mar 2021 - Sep 2021

Personal Project

- Inspired by Cal Newport's 'Deep Work,' this productivity tool reimagines focus tracking. Disappointed by existing options, I built a personalized timer aligning with Newport's research. This NextJS application uses Docker, AWS, and a robust backend (Redis, Postgres, GraphQL, etc.) to deliver an optimized deep work experience.
- Technologies: NextJS, Docker, AWS, Redis, Postgres, Jotai, GraphQL, Strawberry, FastAPI, SQLModel
- View Project: GitHub

Tangible AI Internship

Oct 2023 - Jan 2024

Tangible AI

- During my internship at Tangible AI, I developed and evaluated various information retrieval (IR) systems to enhance search results within a corpus of health documents. Starting with TF-IDF, I created a pipeline for processing and assessment, then compared results against a BERT-based vectorizer. This project, alongside Hobson Lane's 'NLP in Action,' deepened my understanding of natural language processing.
- Technologies: Jupyter, Pandas, SpaCy, NumPy, SciKit, HuggingFace, Joblib, PyTorch
- View Project: GitHub

Harmony Within

Jan 2021 - Apr 2021

Professional Project

- This professionally designed website empowers health coaches to effectively manage their practice and attract new clients. The platform provides a comprehensive suite of tools for client engagement, appointment scheduling, and resource sharing, all presented in an elegant interface that fosters trust and credibility.
- Technologies: Gatsby, Stripe, Sanity.io, Acuity Scheduler

Portfolio May 2020 - Present

Personal Project

- My portfolio website showcases my projects, services, and insights while serving as a dynamic testing ground for innovative code practices, technologies, and design principles.
- Technologies: Next, Tailwind CSS, Framer motion, MDX, Vercel

• View Project: Website

Devarity Jan 2020 - Jun 2020

 $Indie\ Game\ Distribution\ Platform$

- This indie game distribution platform champions independent game developers by offering fairer profit margins and a unique customer experience. At launch we featured over 50 games from our partners.
- Technologies: PHP, MySQL, Python, Bootstrap, JQuery