# Ethan Hosier

+44 7476 133726 | ethan.hosier22@imperial.ac.uk | https://www.ethanhosier.com/ | github.com/EthanHosier

## EDUCATION

# Imperial College London

London, UK

Bachelor of Engineering in Computing

• Achieved First Class Honours in First Year

Oct. 2022 - June 2025

# Experience

# Full-Stack Software Developer, Founder | TypeScript, React, Next.js, Firebase

May 2023 – July 2023

321 Restaurants London, UK

- Founded a software startup dedicated to empowering small, independent restaurants through affordable solutions.
- Conducted market research to understand industry needs and, as the sole full-stack software developer, developed a comprehensive content management system, dashboard and individualised websites.
- Gained valuable experience in product development, market analysis, and demonstrated proficiency in designing and implementing full-stack solutions.

## HACKATHONS

IC Hack February 2024

AI-Powered Trading Statements Analyser

London, UK

- As part a team of five computing students, developed a tool that performed web scraping and AI-powered analysis of trading statements from the London Stock Exchange website.
- Personally trained a custom BERT language model to perform sentiment analysis on the positivity of each sentence within the statement. Also designed and built the entire, sleek frontend of the app, as well as some of the backend.
- Successfully integrated LangChain to navigate the statements' biased, excessively optimistic corporate language, providing fact checking and additional context to the user via web searches.
- Technologies: Python, Flask, TypeScript, React, Next.js, LangChain, Docker, Hugging Face, OpenAI

#### AI Ventures Hackathon

January 2024

GILO Consulting - The AI-Powered Future of Consulting for Small Businesses & NGOs

London, UK

- Collaborated with two business students to create an AI-powered consulting platform, which we pitched to VCs.
- As the sole technical member of our team, developed gainshare contract generation, consultant profiles, a dashboard, and a chatbot custom-trained to match our clients directly to the most relevant consultants.
- Gained valuable experience working in a team with diverse skillsets and producing software quickly.
- Technologies: TypeScript, React, Next.js, OpenAI API.

# SIDE PROJECTS

## Large Language Model (GPT) | Python, PyTorch, Jupyter Notebook

December 2023

- As a side project, used deep learning to develop a large language model from scratch, capable of generating human-like text using next token prediction.
- Extensively trained the model on the OpenWebText dataset with PyTorch and CUDA-enabled GPU acceleration.
- Built a python chatbot CLI to allow users to interact with the model through prompts.

## RSS Aggregator | Golang, PostgreSQL, RESTful API

November 2023 – December 2023

- Designed and implemented an efficient web scraper in Golang to parse and aggregate content from RSS feeds.
- Integrated an API key-based authentication system to secure access to the RSS aggregator.
- Developed a RESTful API that allows users to interact with the RSS aggregator, including endpoints for adding, retrieving, and managing RSS feeds.
- Utilised PostgreSQL for the storage of scraped RSS feed data.

## TECHNICAL SKILLS

Languages: Java, Python, TypeScript, JavaScript, Golang, C, Scala, Haskell, SQL, HTML/CSS

Frameworks: React.js, Next.js, React Native, Node.js, Express.js, Tailwindcss

Libraries: PyTorch, Pandas, NumPy, Matplotlib, Scikit-learn

Developer Tools: Docker, MongoDB, Git, Jupyter Notebook, Firebase, AWS, Google Cloud Platform, Figma, VS

Code, Visual Studio, PyCharm, IntelliJ, PgAdmin