Eric Zhu

Experienced software engineer focused on backend systems and machine learning

0412-137-895 | linkedin.com/ericfzhu | ericfzhu909@gmail.com | github.com/ericfzhu | ericfzhu.com

Education

Bachelor of Science, Computer Science (Artificial Intelligence)	Oct 2022

University of New South Wales | Sydney, Australia

Treasurer and Vice President at PCSoc, Data Scientist at Redback Racing and Developer at Enactus

Relevant Experience

NotesCast, Sydney | Founder, Software Engineer   Jul 2023 - Present
- Built an app that creates notes for podcast episodes from generated transcripts using Auto Speech Recognition
- Architected and deployed Alexandria, a RAG feature that uses notes and transcript data with GPT-4 for podcast Q&A
- NotesCast extracts key insights using GPT-3.5 and Mixtral with Chain of Density prompting and prompt compression
- All relevant data are embedded in sliding windows using AdaV2 and SPLADE for hybrid vector search

National Australia Bank, Sydney | Software Engineer Intern   Jan 2022 - Feb 2023
- Delivered robust production features for the New Payments Platform using Java, Spring and Jenkins on AWS
- Engineered and shipped the feature that enabled businesses to process inbound transactions using PayID
- Triaged and fixed a backpressure bug in Kafka where payment transactions would disappear during high traffic
- Improved deployment and testing procedures using Python and HashiCorp Vault, resulting in an 8% increase in QA efficiency

The University of Sydney, Sydney | Research Engineer   Nov 2021 - Apr 2022
- Contributed to the design of a semantic segmentation algorithm for detecting anomalous contextual changes in streaming sensor data
- Designed and implemented a website using Gatsby and Contentful CMS for the demo of research results

MAPFRE Insurance, Shanghai | Software Engineer Intern   Nov 2019 - Feb 2020
- Collaborated with a senior engineer to create a new mobile app using React and Vue.js, which resulted in a 18% reduction in incident response time using an optimised routing algorithm

Selected Projects

"WEBSITE" | github.com/ericfzhu/website   Sep 2023 - Present
- My personal website built using Next.js, Framer Motion, and p5.js

Canvas Processing | https://ericfzhu.com/?windows=processing&fs=processing   Oct 2023 - Oct 2023
- Creative coding with p5.js

Skills & Interests

Programming Languages: Python, Java, JavaScript, TypeScript, C, C++
Libraries & Tools: PyTorch, React, Next.js, Gatsby, Cypress, Spring, LangChain, Docker, Firebase, Amazon EC2, ECR
Databases: PostgreSQL, Pinecone VectorDB, MySQL, MongoDB NoSQL, SQLite
Interests: Machine learning, investing, industrial engineering, fashion, reading

Certifications

AWS Certified Cloud Practitioner, Microsoft Certified: Azure AI Fundamentals