

Eric Zhu

0412-137-895 | [linkedin.com/in/ericfzhu](https://www.linkedin.com/in/ericfzhu) | ericfzhu909@gmail.com | github.com/ericfzhu | ericfzhu.com

Experienced software engineer focused on building backends and machine learning systems in Python and Java. Currently working on NotesCast, a site that provides condensed notes of the top podcasts in business, technology, and health, allowing users to learn from the best in the world in minutes. Also a scholar of philosophy and design.

Experience

-
- NotesCast**, Sydney, Australia | Founder, Software Engineer Jul 2023 - Present
- NotesCast uses Automatic Speech Recognition and Large Language Models alongside various prompting techniques, such as Chain-of-Density, to translate podcasts into its key insights
 - The data is also embedded to power Alexandria, a Retrieval Augmented Generation agent that allows users to query for industry-specific knowledge, as well as a recommendation engine
- National Australia Bank**, Sydney, Australia | Software Engineer Intern Jan 2022 - Feb 2023
- Utilized Spring and Jenkins with AWS to create robust microservices, significantly enhancing TLM capabilities
 - Engineered the feature enabling businesses to process inbound transactions using PayID
 - Triaged and fixed a backpressure bug in Kafka where payment transactions would disappear during high traffic
 - Authored comprehensive documentation for newly developed features, facilitating smoother transitions into production
 - Enhanced deployment and testing protocols using Python and Terraform, achieving an 8% improvement in QA efficiency
- The University of Sydney**, Sydney, Australia | 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, China | Software Engineer Intern Nov 2019 - Feb 2020
- Collaborated with a senior engineer to create a new mobile app using Vue.js and Node.js, which resulted in a 18% reduction in incident response time using an optimised routing algorithm

Education

University of New South Wales 2022
Bachelor of Science, Computer Science (Artificial Intelligence)

Skills & Interests

Languages: Python, Java, TypeScript, JavaScript, HTML, CSS, C, SQL, Solidity
Libraries: PyTorch, React, Next.js, Gatsby, Vue.js, Spring, LangChain, Docker, Firebase, Scipy, Terraform, Kubernetes
Databases: PostgreSQL, PineconeDB, MySQL, MongoDB, SQLite, DynamoDB, Redis
Tools: Notion, Figma, Canva, Runway ML

Works

-
- "WEBSITE"** | github.com/ericfzhu/website | <https://ericfzhu.com/?windows=works>
- A canvas where coe is the paintbrush, built using Next.js, Framer Motion, p5.js, and Notion
- Imitator** | github.com/ericfzhu/imitator
- Image-to-image translation using ResNeXt-based GAN, built using PyTorch
- Palette** | <https://github.com/ericfzhu/palette>
- Color generator using Stable Diffusion XL
- Codex** | <https://codex.ericfzhu.com/>
- On the memetic nature of wisdom, built using Next.js, Three.js, and PineconeDB

Certifications

AWS Certified Cloud Practitioner, Microsoft Certified: Azure AI Fundamentals