

Zhao Xin (Charles) Ong

📁 Projects / Experience

Machine Learning Intern at Curtin Industry Exchange Trailblazer & Curtin TMSG

November 2023 — February 2024

- Developed Svelte frontend and Django backend for a containerised web application that enables geologists within TMSG to conduct zircon grain analysis
- Used technologies such as Typescript, Python, Django REST framework and Docker.
- Trained, validated and implemented a custom fine-tuned image segmentation model/ process using YoloV8 and Segment Anything Model (SAM) for producing binary masks of zircon grains in different types of imagery.
- Developed and integrated and improved an existing machine learning prediction pipeline along with its models into web application.

Aspire Race Around Campus Application (Capstone Project) at Aspire UWA

July 2022 — November 2022

- Developed ReactJS frontend and ExpressJS backend for a web application that enables campus tours and other activities to be conducted on the University iPads
- Used technologies such as Javascript and SQL.
- Collaborated in a team of 6 students from various majors in the computing/engineering faculty, with rotations in different roles such as team manager, coder, documenter and tester.
- Applied the Scrum methodology, which included 3 "sprint" stages, during which regular meetings and discussions with the client, auditor and mentor occurred throughout the project lifecycle

Parkspot Perth at Personal Side Project

January 2023

- Developed and deployed a web application that helps user find parking spaces in the Perth metropolitan area along with corresponding parking fees, times and directions using technologies such as ReactJS, Mapbox API and Netlify.
- Implemented a user submission feature that allows users to suggest a parking spot that has not yet been added on the app.
- Available at <https://parkspotperth.netlify.app/>

Details

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Links

Website

LinkedIn

GitHub

Skills

Programming Languages:

Python, Java, C, R, SQL

Web Development:

HTML, CSS, JS, ReactJS, Svelte, ExpressJS, Django REST Framework

Software Development:

Scrum Methodology, Git, Docker

Tools:

Visual Studio Code, Jupyter Notebook, RStudio

Machine Learning:

Natural Language Processing, Classification, Segmentation, Detection, Super Resolution, Reinforcement Learning, Feature Engineering

Languages

English

Mandarin Chinese

🎓 Education

Master of Computing, Curtin University

February 2023 — November 2024

Major in Artificial Intelligence, WAM: 80.43

Bachelor of Science, University of Western Australia

February 2020 — November 2022

Major in Computer Science

📖 References

Kit Yan Chan, Curtin University

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