Zhao Xin (Charles) Ong

Experience / Projects

ML Intern - Curtin Industry Exchange & Curtin TMSG
November 2023 — February 2024

- Developed Svelte frontend and Django backend for a containarised web application that enables geologists within TMSG to conduct zircon grain analysis.
- Used technologies such as Typescript, Python, Django REST framework, Git 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) - 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 HTML/CSS/JS, Git 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 occured throughout the project lifecycle.

Parkspot Perth - Personal Side Project
January 2023 – Present

- Developed and deployed a web application that helps user find parking spaces in the Perth metropolitan area.
- Used technologies such as ReactJS, Mapbox API and Netlify.
- Implemented heatmap visualisations for densely populated parking areas and map markers that show parking fees, times and directions upon user-interaction.
- Implemented user submission features that allow users to suggest a parking spot that has not yet been added on the app.

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

Double Major in Computer Science and Accounting

References

Professor Chris Kirkland, Curtin University
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Dr Kit Yan Chan, Curtin University
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Details
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Links
Website

LinkedIn

GitHub

Skills
Programming Languages:
Python, Java, C, R, SQL

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

Web Development:
HTML, CSS, JS, ReactJS, Svelte, ExpressJS, Django REST Framework

Software Development:
Scrum Methodology, Git, Docker

Tools:
Visual Studio Code, Jupyter Notebook, RStudio

Languages
English

Mandarin Chinese