Cooper Ellidge

0458 781 380 | cooper.ellidge@gmail.com | github.com/cooperellidge

Experience

iO Energy

Software Engineer — *Sep 2023 – Now*

- Developed features for an internal energy retail sales platform, improving customer growth from 1000 to over 2000 customers and reducing sales agent errors, using React, Javascript, AWS, and Flask.
- Forecasted electricty demand and financial profit using Python, Pandas, FB Prophet
- Created and maintained Python microservices for handling customer signups, plan managements, and sales agent commisons.
- Developed a full-stack app to calcualte and manage over-the-counter financial contracts and AEMO market settlements.
- Used Snowflake data warehouse to integrate data ETL pipelines into BI and risk management dashboards.
- Designed and architected a new energy retail SaaS product using Django, React, Typescript, and Docker.

Saab Australia

Software Engineer — *Jan 2023 – Aug 2023*

- Designed, developed, integrated and tested modules with for 9LV Combat Management System using Java, Vue, Typescript, and DDS in a MVVM software architeture.
- Presented new software capability to RAN customers during contract milestone demonstrations.

Early Careers Lead — *Sep 2022 – Aug 2023*

- Coordinated over 50 graduates and interns for Saab's Early Careers Programs, including developing the programs' strategic direction, determing rotations, providing mentorship, and organising events.

Graduate Engineer — *Jan 2021 – Dec 2022*

- Using full-stack software engineering skils to deliver naval operator user interfaces and enhanced tactical capabilities for RAN's surface fleet.
- Created a internal Python package to model and analyse autonomous vehicle's algorithm performance.
- Conducted extension requirments analysis and delivered design documents for hospital modules for Defence's deployable hospital program (JP2060), receiving a company Gold award nomination for critical efforts in producing major contract delivarables.
- Designed mechanical components in collaboration with Swedish submarine team, for their submarine program.

Undergraduate Engineer — *Nov 2019 – Feb 2020*

- Prototyped and evaluated deep learning models using Python to improve environmental measurements using sensor data. The capability has since been succesfully tested on-ship during sea trials.

Centre for the Subatomic Structure of Matter, University of Adelaide

Physics Summer Research Student — *Jan 2019 – Feb 2019*

- Modelled experimental results for theoretical dark matter particles using a cloud supercomputer.

Education

University of Adelaide

Bachelor of Engineering (Mechanical)(Honours) with — *Feb 2016 – Nov 2020*

Bachelor of Science (Mathematics and Theoretical Physics) — *GPA 6.7/7.0*

Skills

Languages: Python, JavaScript, TypeScript, Java, HTML/CSS, SQL
Tools, frameworks, and libraries: React, Vue, Django, FastAPI, Streamlit, AWS, Terraform, Docker, Jenkins, pandas, NumPy, SciPy, Matplotlib, Plotly, keras, scikit-learn, FB Prophet, Snowflake, Dagster, DBT, Git, GitHub, Jira, BitBucket, Confluence, FeCru, Notion, Figma
Software: Creo Parametric, AutoDesk Inventor, SolidWorks, DOORS, Windchill, IFS, MATLAB, Simulink, ANSYS suite, COMSOL Multiphysics, Microsoft Office suite