Cooper Ellidge

📞 0458 781 380 | ✉ cooper.ellidge@gmail.com | ⌂ cooperellidge.github.io | ⌨ github.com/cooperellidge

EXPERIENCE

iO Energy

Software Engineer — *Aug 2023 – Now*

- Developed features for an internal energy retail sales platform, enabling customer growth to double to 2000+ customers while reducing sales agent errors, using Python, React, Javascript, and AWS.
- Forecasted electricity demand and financial profit using Python, pandas, and FB Prophet.
- Created microservices for handling customer signups, retail plan management, and user management.
- Produced a Python package to encapsulate domain concepts, reducing code duplication across projects.
- Developed a full-stack app to calculate and reconcile financial contracts with AEMO market settlements.
- Used Snowflake data warehouse orchestrated with Dagster and DBT to integrate 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*

- Implemented the entire software engineering lifecycle for 9LV Combat Management System using Java, Vue, and Typescript in an MVVM software architecture following strict coding standards and SOLID design principles.
- 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, determining rotations, providing mentorship, and organising events.
- Created an optimisation algorithm for team assignment, balancing business needs with graduate preferences.

Graduate Engineer — *Jan 2021 – Dec 2022*

- Using full-stack software engineering skills to deliver naval operator user interfaces and enhanced tactical capabilities for RAN's surface fleet.
- Created an internal Python package to model and analyse autonomous vehicle's algorithm performance.
- Conducted requirements analysis and designed hospital modules for Defence's deployable hospital (JP2060), receiving a company award nomination for critical effort in producing major contract deliverables.
- Created mechanical designs for the Swedish submarine program, collaborating with our Swedish colleagues.

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 successfully tested during sea trials.

PROJECTS

Personal Sites | *React, Next.js, Material UI, shadcn/ui, Python, AWS, Terraform*

- Built a site for my wedding, including passcode protection, RSVPs, notifications, and Maps integration.
- Designed a static personal site for showcasing skills and experiences, using Next.js and shadcn/ui.
- Created a personal Streamlit dashboard using pandas and Plotly to explore home electricity usage.

Resume Repo | ⌨ github.com/cooperellidge/resume | *LaTeX, GitHub Actions*

- Built a repo that compiles a resume (this one!) to PDF using GH Actions and deploys it to GH Pages.

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, SQL, HTML, CSS
Tools and libraries: React, Vue, Next.js, AWS, Terraform, Docker, Jenkins, FastAPI, Django, Streamlit, pandas, NumPy, SciPy, keras, scikit-learn, FB Prophet, Snowflake, Dagster, DBT, Git, GitHub, Jira, BitBucket, Confluence, Notion

Referees available upon request.