# Cooper Ellidge

J 0458 781 380 | ■ cooper.ellidge@gmail.com | ★ cooperellidge.github.io | ♠ github.com/cooperellidge

# EXPERIENCE

## pointData

Software Engineer

Jun 2024 - Now

- Upgrading the data platform from bespoke Python ETL pipelines to a modernised Dagster-based stack using Docker.
- Improving core Python library code by bringing software engineering best-practices to the data science team.

# iO Energy

Software Engineer

Aug 2023 - Jun 2024

- 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.

#### 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 shadon/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 report 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, TypeScript, JavaScript, SQL, HTML, CSS, Java

**Tools and libraries**: React, Docker, AWS, Terraform, Jenkins, FastAPI, Streamlit, pandas, NumPy, SciPy, scikit-learn, FB Prophet, Snowflake, Dagster, DBT, Git, GitHub, GitLab, Jira, BitBucket, Notion