Cooper Ellidge

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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, Python, and Flask.
- Forecasted electricity demand and financial profit using Python, pandas, and FB Prophet.
- Created microservices for handling customer signups, plan management, and sales commissions.
- Developed a full-stack app to calculate and reconcile financial contracts with AEMO market settlements.
- Used Snowflake data warehouse 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*
- Designed, developed, integrated and tested modules for 9LV Combat Management System using Java, Vue, Typescript, and DDS in an MVVM software architecture.
- 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.
- Designed mechanical components for the Swedish submarine program in collaboration 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.

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.

PROJECTS

Wedding Site | *React, Python, Material UI, AWS, Terraform*
- Created a site for my wedding, including passcode protection, RSVPs, notifications, and Google Maps integration.

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, AWS, Terraform, Docker, Jenkins, FastAPI, Django, Streamlit, pandas, NumPy, SciPy, keras, FB Prophet, Snowflake, Dagster, DBT, Git, GitHub, Jira, BitBucket, Confluence, Notion
Software: Creo Parametric, MATLAB, Simulink, ANSYS suite, AutoDesk Inventor, SolidWorks, DOORS, Windchill, IFS, Microsoft Office suite