ADAM GREEN

adam.green@adgefficiency.com - adgefficiency.com - linkedin - github - based in Christchurch, New Zealand.

SUMMARY

Data professional with experience as a data scientist and data engineer. Expert domain knowledge of energy systems.

Passionate about teaching & mentoring of new data professionals, with five years experience teaching data science to mid-career professionals. My long term dream is to start New Zealand's first data science bootcamp in Christchurch.

Currently my focus is on developing my technical skill, along with developing my professional network in New Zealand.

EMPLOYMENT

Jan. 2021 to Current - Data Engineer - Gridcognition - Remote

Building the data engineering infrastructure for an early stage tech company:

- Worked as the sole data engineer in an Agile team of five software engineers and one data scientist, building backend services in Python and managing infrastructure with AWS Cloudformation.
- Built a service to request and store data from a paid third party API with AWS Lambda, Python and S3.
- Introduced data orchestration to the company, leading to the adoption of Prefect for managing our data pipelines, running ETL tasks on Docker images on AWS Elastic Container Service.
- Managed scheduled pipelines to ingest publicly available market data into an AWS RDS Postgres instance.
- Created a business intelligence system, processing application data from AWS DynamoDB into Postgres with a Tableau frontend.
- Converted a Jupyter Notebook developed by our data scientist into a data pipeline for processing customer interval data with AWS Lambda and S3.
- Reworked our AWS Lambda tooling to work with Docker images, improving maintainability by avoiding Lambda layers.
- Developed continuous integration (CI) and continuous development (CD) for backend services on Github Actions, introducing Makefiles and mypy static type checking to improve reliability.

Oct. 2020 to Jan. 2021 - Reinforcement Learning Consultant - Elia Group - Remote

Applying reinforcement learning to European energy trading - learning an off-policy value function from human expert data.

2019 to 2020 - Bootcamp Director - Data Science Retreat - Berlin

Management at one of Europe's longest-running data science bootcamps:

- Developed data science courses, including test driven development, time series analysis, statistics and distributed computing.
- Hands-on technical mentoring of 40 student projects, including tabular data, computer vision, NLP and reinforcement learning.
- Interviewing and selection of students, supporting their technical & professional development during the program.
- Lead the school to be named in SwitchUp's Best Data Science Bootcamps in 2020 - an honour the school had not received in its five year history.

2017 to 2019 - Data Scientist - Tempus Energy - London & Remote

Worked on unlocking flexible electricity demand in Australia in an early-stage company. Part of a technical team of data scientists and software engineers:

- Developed a mixed-integer linear programming optimization model to optimize the dispatch of battery storage and to measure the accuracy of our price forecasting. Model was put into production in a Docker container.
- Built reinforcement learning models in Tensorflow to control electric battery storage and flexible chiller demand.
- Used random forests, gradient boosting & deep learning time series forecasting of NEM electricity prices.

2012 to 2016 - Energy Engineer - ENGIE - London

- Development of technical & financial (energy sale, O&M and discounted cash flow) models for large energy projects in Excel,
- Development and application of Mixed Integer Linear Programming models for optimization of some ot the UK's largest industrial & district heating sites, including the 90 MWth district heating scheme at the London Olympic Park.

EDUCATION

2011 to 2012 - The University of Manchester - MSc Advanced Process Design for Energy.

2006 to 2010 - University of Canterbury - B.Eng Chemical & Process Engineering with Honors.