Callum Battilana

Melbourne, Australia   callum.battilana@bigpond.com   0444-551-698   M Medium   in Linkedin
GitHub

Skills

Languages	**Proficient:** Python, R
	Experienced: SQL, Excel
Tech Stack	Jupyter Notebook (Anaconda), Pycharm, Rstudio, Git

Experience

Bureau of Meteorology | Data Scientist Intern
Jul 2025 – Oct 2025
Docklands, Melbourne

- Developed a Convolutional Neural Network machine learning model for estimating global wind patterns every hour across the globe using Python. The technical tools used include Pandas, PyTorch, and Tensorflow.
- **The model's accuracy was 78 percent on average across all regions of the globe, while only receiving data from just 0.7 percent of the globe**. This model could **increase forecasting efficiency by 100 times** compared to traditional approaches.
- Presented my findings globally to climate researchers who were part of the APARC Reanalysis Inter-Comparison Project. Wrote a 13,000 word thesis which recieved a high distinction. Findings will be published soon in an academic journal.

Asahi (Carlton United Breweries) | Data Scientist Intern
Jul 2024 – Oct 2024
Abbotsford, Melbourne

- Used Excel VBA to develop prototypes of various Statistical Process Control (SPC) charts that can predict future issues with can seamer quality in real time. Preliminary tests to validate chart performance was done using R.
- These charts **were able to diagnose problems weeks before they were found manually by the company.** If these charts were used earlier by the company, **5 million dollars would have been saved** in 2023 alone.
- These charts apply forecasting techniques to analyse trends in manufacturing quality such as taking the moving average. Statistical tests on these charts such as the ANOVA and t-test are then used to highlight future issues with can seamer quality.
- Worked in a cross-functional team with Engineers, Mechanical Operators, and Quality Maintenance professionals.

Education

Monash University
Feb 2022 – Nov 2025
Applied Data Science (Honours): **Grade: 3.281/4 (Distinction)**
Clayton, Melbourne

Hobbies

- Write Data Science related articles on Medium.
- Keen chess player. Played in competitions at school, and I still play frequently online.
- Play viola: Joined an orchestra at University.

Volunteering

Interchange Outer East
Mar 2025 – Present
Ferntree Gully, Melbourne

- Looking after disabled people and socializing with them while going on fun activities.