Tom Marsh

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Human readable CV:

About me

I am a very curious and quick-learning individual who thrives when challenged and exploring unfamiliar domains. I am just as comfortable working in a team environment, bouncing ideas off each other, as I am plugging away solo with some headphones in. I enjoy breaking down complex topics into digestible fragments which has led me to add a teaching and mentoring component to my current role and outside of work.

Experience

FEBRUARY 2018 - Present

Ströer Labs NZ, Christchurch NZ - Data Scientist

Company: Ströer Labs NZ is a New Zealand based development house for the European digital programmatic advertising company Ströer. Here I picked up many different programming languages and technology stacks while working in an AGILE environment.

My role: I started working for Ströer as a Java-based Software Engineer before being given the opportunity to help start a data team for our New Zealand branch. This allowed me to experience the full spectrum of data roles including; Data Engineering, Data Science, and Machine Learning Operations. Giving me a solid foundation for taking projects from end to end.

Projects: These ranged from typical classification and numeric prediction to optimisation and risk management. As most of the data was categorical in nature this led to mainly decision tree-based algorithms and timeseries analysis. The datasets were also in the TB and PB range so batched spark jobs utilising distributed computing was a must.

Highlights: Reducing the time taken to render impressions on the page by 50%. Reducing outgoing data costs for some of our applications by up to 35%. Introducing versioning and reporting tooling that is usable by all walks of employees.

Languages

Daily: Python, SQL, Scala

Occasional: Java, Kotlin, JavaScript, C, VBA, GDScript, R

Technologies

Data Engineering: Spark, EMR, AWS Glue, Apache Airflow, Apache Kafka, Amazon S3

Data Science: LightGBM, XGBoost, Sklearn, Pandas, NumPy, Jupyter Notebooks, Keras, TensorFlow

Machine Learning Operations: AWS SageMaker, AWS Lambda, Docker, Kubernetes

Other: Streamlit, AWS Athena, SuperSet, Linux, OSX, Godot Engine

Education

JULY 2022 - Present

University of Canterbury, Christchurch NZ - MSc Physics

My research area is Atmospheric Physics with a specialisation in extreme weather event analysis and climate change.

FEBRUARY 2015 - DECEMBER 2017

University of Canterbury, Christchurch NZ - BSc Physics and Computer Science

My research area was Solid State Physics with a specialisation in thin film growth for quantum information applications.

Miscellaneous

Mentoring and Public Speaking

Over the years I have enjoyed mentoring entry-level tech workers from Australia and New Zealand across Data Science, Data Engineering, Software Engineering, and Game Development.

During 2022 I worked with TechWomen NZ alongside another mentor to facilitate a peer group mentoring circle for entry-level tech workers.

More recently in 2023, I have dipped my toes into public speaking on my experience as a Data Scientist.