

CONTACT

tom.ian.marsh@gmail.com

Github (Clickable)

LinkedIn (Clickable)

Personal Website (Clickable)

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 in the form of hosting interns and volunteering outside of work.

TECHNOLOGIES

Data Engineering

Spark, EMR, AWS Glue, Apache Airflow, Apache Kafka, Amazon S3

Data Science

LightGBM, XGBoost, Sklearn suite, Pandas, NumPy, Jupyter Notebooks

ML Ops

AWS SageMaker, AWS Lambda, Docker, Kubernetes

Other

Streamlit, Plotly Dash, AWS Athena, Linux, OSX

LANGUAGES

Daily

Python, SQL, Scala

Occasional

Java, Kotlin, JavaScript, C, VBA

MISCELLANEOUS

Mentoring and public speaking

Over the years I have enjoyed mentoring entry-level tech workers from Australasia across the tech space. 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.

Talented School Students Award 2013

Administered by the Royal Society of New Zealand this scholarship entailed a pilot focussed taste of basic training at NASA.

TOM MARSH

EXPERIENCE

Ströer Labs NZ - Data Scientist

FEBRUARY 2018 - Present

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 being in the TB and PB range meant utilising distributed computing platforms such as Apache Spark was critical.

Highlights: Reducing the time taken to render impressions on the page by 50% (generating tens of millions of Euros each year). Reducing outgoing data costs for some of our applications by up to 35% (saving tens of thousands of USD each year). Introducing versioning and reporting tooling that is usable by all walks of employees.

Foodstuffs South Island

MARCH 2011 - FEBRUARY 2018

Company: Foodstuffs South Island Co-operative is a market leader in New Zealand's Retail Grocery industry. The arm of the company that I worked for facilitated the logistics and storage of chilled and frozen goods.

My role: I began working as a storeperson before becoming a forklift driver then supervisor of the graveyard shift and finally an automation engineer.

Projects: The relevant tech experience from my time at Foodstuffs SI comes from the final couple of years and revolved around automating various tasks and optimising parts of the general operational workflow. Other projects included introducing a series of automated reports and analytics tools for use by upper management.

Highlights: Some of my projects were successful enough to gain the company global recognition for efficiency.

EDUCATION

MSc - Physics - University of Canterbury

JULY 2022 - PRESENT

During part one of my master's degree, I completed an honours capstone project under the Atmospheric Physics department where I quantitatively analysed the impact of anthropogenic climate change on extreme precipitation events over the upper north part of New Zealand. I found this a nice way to bring together my skills and experience gained as a data scientist with my background in physics.

BSc - Physics & Computer Science - University of Canterbury

FEBRUARY 2015 - NOVEMBER 2017

My undergraduate capstone project was in solid state physics where I grew Y2SiO5 thin films to be doped with exotic elements and used as quantum information devices. This taught me many practical lab skills and how to take projects from concepts to minimum viable products.