

Jonathan Tan

Data Scientist

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<https://thesourceco.de>

Sydney, NSW

Skills & Stack

Statistical modelling, Pricing, Financial modelling, Data visualisation, Data analytics, Machine learning, MLOps, CICD, Reporting, A/B Testing, Web scraping

Python, R, Excel, Vba, SQL, Snowflake, Databricks, PySpark, Buildkite, AWS, Azure Cloud, Git, Javascript, NodeJS, Postman, React, NGINX, MongoDB, JIRA, Confluence

Education

2015-2017 M. Actuarial Science
Australian National University

2012-2014 B. Accountancy
Royal Melbourne Institute of Technology

Awards &

Certifications

2023 SCOR Iron Viz winner
2022 nib FACS recognition winner
2018 Part 1 & 2 Actuarial papers
2014 Awarded CPA scholarship

Publications

[2023 SCOR Iron Viz Tableau Submission – Small Changes, Big Impact](#)

[2021 Actuaries digital – Explainable ML: A peek into the black box through SHAP](#)

[2019 Actuaries digital – Version control, because the Recycle Bin doesn't count](#)

[2018 Actuaries digital – Natural Language Processing, text classification](#)

Experienced data scientist and actuary (AIAA) with proven ability to lead and implement end-to-end data driven solutions and products. Skilled with statistical modelling, programming, ML ops and stakeholder management.

Experience

Senior Data Lead @ SCOR SE

Jun 2023 – Present

- Lead and developed a team of 2 analysts, while coaching actuarial teams
- Lead development of ANZ bordereaux processing engine, reducing manual effort by 70%
- Represented AU and won the Global Viz Games on sustainability
- Steered company data strategy and governance policies alongside analytics head & CDO
- Managed data governance for implementation of the global HELIOS project

Manager – Data & Insights @ nib Health Funds

Oct 2022 – Jun 2023

- Lead data taskforce to provide analytics and reporting to assist frontline teams in resolving more than 5,000 GICOP claims breaches over 3 months
- Developed company-wide data science competency through “Analytics & Insights” Workplace page and “Kernel Academy” – a machine learning knowledge sharing group
- Managed and mentored a team of 4 junior analysts to deliver data products across bordereaux reporting, customer and claims analytics, operational analytics

Data Science Lead @ thecanary.xyz

May 2022 – Oct 2022

- Managed a data team and created development process for MVP build for cryptocurrency start up
- Designed and built backend ETL architecture and analytics API from multiple source systems using FastAPI/EC2/Postgres/Python

Senior Data Scientist @ nib Health Funds

May 2021 – Oct 2022

- Developed and implemented COVID pricing strategy through Delta and Omicron waves resulting in a 40% improvement to portfolio performance
- Lead development in end-to-end inhouse technical travel insurance pricing models
- Delivered commercial models for multiple RFPs totalling an estimated \$80m GWP
- Developed data science strategy and model architecture for actuarial team

Pricing Engine Lead @ IAG Ltd

May 2020 – May 2021

- Lead development and launch of Caravan, Trailer, Strata portfolios worth \$50m GWP
- Sprint planning and resource allocation for a team of 4 under AGILE framework
- Built pipeline to automate rate setting process by 60% using Python/R scripting
- Collaborated with business API team to develop ingestion schema for conversion between flat and JSON data
- Lead deployment workflow and integration testing for Home/Motor pricing algorithms using Postman and R

Actuarial Analyst @ nib Health Funds

July 2018 – May 2020

- Developed earnings model with MLE and goodness of fit tests using Scipy/Statsmodels
- Built and deployed travel alerts and embargo decision chatbot using Slack RTM API
- Developed and maintained recurring ETL processes in Snowflake/ Python for reporting
- Modelled and launched new rating factor for direct brand worth \$120m GWP annually and improved portfolio performance by 10%

Other interests/ projects

2024 Co-founder & CTO of data consultancy [Bastion Labs Pty Ltd](#)

2023 Developed AI content pipeline “Glimpse”

2022 Developed an NFT project with an open-source team

2022 Full stack insurance pricing engine built from scratch in Python/Flask/Nodejs/React

2021 Text analytics consulting project for marketing firm

2019 Grab AI Challenge: Safety with telematics