


# DENNIS LIU

## DATA SCIENTIST

### CONTACT

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 tdennisliu.github.io

### INTERESTS

SPORTS

FILM

FOOD

SCIENCE

### EDUCATION

#### PHD MATHEMATICS (STATISTICS)

The University of Adelaide

2017 - 2020

#### B. COMP SCI (APPLIED)

The University of Adelaide

2011 - 2015

#### B. ENGINEERING (HONS)

The University of Adelaide  
First Class Honours

2009 - 2013

### PROFILE

Intensely curious about all things data and science, but specifically systems design, meaningful insights and learning algorithms. I have been part of all many of teams, from leading milestone project teams to deliver features in lean startup environments to being a key contributor to the COVID modelling task force reporting to federal government.

### EXPERIENCE

#### DATA SCIENTIST

Hatch | Sydney | 2020 - present

Responsible for predictive machine learning models, data analytics and business intelligence.

Tech stack includes AWS Lambda, S3, Cloudwatch, PostgreSQL, pytorch, numpyro, sklearn, pandas, git.

- Productising and deploying predictive models, including recommender systems
- Utilise Large Language Models (LLM) to build embeddings for model pipelines
- Working with subject matter experts to craft algorithms that deliver value to users
- Developing data pipelines to serve product analytics, reporting metrics and ML training algorithms

#### RESEARCH DATA SCIENTIST

The University of Melbourne | 2019 - 2020

Using my expertise in Data Science and Epidemiology, I was contracted by the Federal Government to provide modelling and forecasting of COVID-19 cases in Australia. I used Bayesian machine learning techniques to link social mobility with disease transmissibility.

Tech stack includes pandas, R, python, git, pystan, prophet

- Deliver regular forecast to key non-technical stakeholders
- Communicate model predictions and uncertainty to technical and non-technical (Cabinet Members).
- Utilise big data from digital sources