

# DENNIS LIU

## DATA SCIENTIST

### CONTACT

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### 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, working as the single functional lead in the business. Tech stack includes AWS Lambda, S3, EC2, PostgreSQL, pytorch, numpyro, sklearn, pandas, git.

- Productising and deploying predictive models, including recommender systems
- Utilise transformer architecture for generative AI models.
- 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 forecasts and recommendations to key decision makers
- Communicate model predictions and uncertainty to technical and non-technical (Cabinet Members) stakeholders
- Feature engineering including mobility data