# **DENNIS LIU**

# DATA SCIENTIST

### CONTACT

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- Sydney, Australia
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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, 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 anlaytics, 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