# **Chi Yunng Lim**

Email: x [at] y; x = cyunng.lim, y = gmail.com | https://belowwind-islander.github.io/

#### **EDUCATION**

## MSc in Data Science, London School of Economics and Political Science

*Graduating September 2025* 

- Achieved: Distinction.
- Notable modules include Machine Learning and Data Mining; Deep Learning; Reinforcement Learning; Graph Data Analytics and Representation Learning; and Distributed Computing for Big Data (audited).
- Capstone project with Transport for London titled: "Quantifying the Socioeconomic Impacts of the Superloop Bus Line".

#### BSc in Actuarial Science (Statistics), London School of Economics and Political Science

September 2019 - June 2022

Achieved: 1st Class Honours.

## PROFESSIONAL EXPERIENCE

# Ageas UK

#### Actuarial Analyst – Statistical Modelling and Data Science

January 2024 - July 2024

- Developed and researched alternate statistical distributions for a Monte Carlo simulation model to estimate 99.5% VaR for regulatory capital against Natural Catastrophe risk, improved capital allocation by 1.9%. (SQL/R)
- Implemented text-mining to automate data cleaning for frozen pipe claims, saved 10 hours per quarter. (SQL/R/NLP)
- Re-engineered company's 'Best Estimate' model for capital reporting and reduced process time by 50%. (SQL/Python)
- Mentored and aided the development of 2 new Trainee Actuaries in reserving methodologies and tools.
- Achieved promotion from 'Trainee Actuary' position 9 months early.

#### Trainee Actuary – Data Analysis and Visualisation

September 2022 – January 2024

- Designed and implemented end-to-end ETL pipeline into a monthly-updated claims analytics dashboard for the Household business, reducing manual reporting time by 7 hours monthly. (SQL/Power BI)
- Applied time series methods to analyse cyclical trends in claim frequency and severity to forecast and phase the 2023 financial budget; reduced root mean squared variation to budget by 0.8%. (SQL/R)
- Collaborated with Pricing team to revamp Long-Term Pricing strategy, modelling, and visualisation process for the Household business. (SQL/Power BI)
- Performed regular analysis of claims and calculated liability provisions reporting to Chief Actuary and Chief Financial Officer. (SQL/Excel/Python/PowerPoint)

#### **PROJECTS**

# Detecting Behavior with Sensor Data - Kaggle Competition by Child Mind Institute (Python)

In progress

Researching predictive techniques to classify "body-focused repetitive activity" from data collected from wrist-worn devices.

# **Locating Flagellar Motors in 3-D Reconstructions of Bacteria (Python/PyTorch/Computer Vision)**

April 2025

 Researched and implemented computer vision models to detect bacterial flagellar motors in 3D microscopy data – achieved 0.761 F2-score.

# Nowcasting UK Housing Statistics, HM Treasury AI Hackathon (Python/R)

February 2025

Experimented with different forecasting techniques to predict new housing completions for government decision-making.

# Crime and Socioeconomic Factors in London (Python/Scikit-learn/Matplotlib/BeautifulSoup)

January 2025

• Engineered a data pipeline to scrape, clean and analyse socioeconomic and crime data.

## Classifying Immune Cells with Machine Learning (R)

December 2024

• Applied principal component analysis and tuned multiple classifiers to identify immune cell types from high-dimensional genomic data, achieved 0.951 F1-score.

## Statistical Analysis of Pass Rates at Crawley and Wood Green Driving Test Centres (R)

December 2024

Conducted rigorous hypothesis testing and used logistic regression to analyse factors influencing driving test outcomes.

## **OTHER EXPERIENCE**

## 2<sup>nd</sup> Team Captain, LSE Men's Table Tennis

September 2024 – Present

Session Organiser, PlayFit Sports & Social (Basketball)

April 2023 – Present

# ADDITIONAL SKILLS

**Programming Languages, Frameworks & Tools:** Python, SQL, R, TensorFlow, PyTorch, Scikit-Learn, XGBoost, PySpark, Git & Github, Google Cloud Platform, Power BI, Big Query, Microsoft Excel, Powerpoint & Word.

**Other Skills:** Linear & Logistic Regression; Stochastic Simulation; Hypothesis Testing; Time Series & Forecasting; Dimension Reduction; Feature Engineering; Neural Networks; Model Evaluation; Data Visualisation.