Jonathan Kelly

jkenniskerry@gmail.com | +353 87 397 5252 | LinkedIn | Github

EDUCATION

University of Cambridge - MASt, Applied Mathematics and Statistics (Part III)

Oct 2025 - June 2026 | Cambridge, United Kingdom

- **Relevant Modules:** Modern Statistical Methods, Statistical Learning in Practice, Stochastic Calculus with Applications to Finance.

Trinity College Dublin - BA, Mathematics | **Final Grade: 83% First Class Honours**

Sep 2020 - May 2024 | Dublin, Ireland

- **Relevant Modules:** Linear Algebra, Statistics, Probability, Artificial Intelligence, Partial Differential Equations, Algorithms and Data Structures.
- **Student Societies:** Maths Society (Webmaster), Student Managed Fund (Analyst for Quant Sector).
- **Exchange Program:** Completed a semester abroad at McGill University (Sep 2022 - Dec 2022).

EXPERIENCE

Murex - Credit Risk Consultant

Jun 2024 - Aug 2025 | Dublin, Ireland

- Worked with development teams to deliver Credit Risk and xVA solutions to clients.
- Delivered a project on alternative aggregation methodologies for various credit risk metrics, providing recommendations to improve exposure accuracy for the credit risk analytics team.
- Leveraged knowledge in Mathematical Modeling, Python, Numpy, SQL, Spark, Linux, ETL pipelines.

PwC - Technology Consultant (Internship)

Jun 2023 - Jul 2023 | Dublin, Ireland

- Worked as an analyst on the automation of revenue settlements for a client project for eSW (eShopWorld).

Self-Employed - Maths Tutor

Sep 2020 - CURRENT | Dublin, Ireland

PROJECTS

Applications of Stochastic Processes to Population Modelling | Dec 2024 - Feb 2025

- Developed and calibrated a mean-reverting Ornstein-Uhlenbeck model to capture stochastic dynamics in population birth and mortality rates.
- **Utilized:** Python, Pandas, Time Series Analysis, Maximum Likelihood Estimation, Historical Data.

Predicting Stock Prices using Geometric Brownian Motion | Sep 2024 - Nov 2024

- Developed a Geometric Brownian Motion (GBM) model to simulate and predict future stock prices of the S&P 500 based on historical market data.
- **Utilized:** Python, Stochastic Calculus, Monte Carlo Simulation, Statistical Estimation, Data Visualisation.

SKILLS

Languages: Native English, B1 Level Spanish.
Programming Languages: (Proficient) Python, Matlab, SQL, **(Familiar)** R, Java, C.
Technologies/Frameworks: (Proficient) Pandas, Numpy, Matplotlib, Git; **(Familiar)** Tensorflow.

AWARDS

Trinity Gold Medal: Top ranked student in final year mathematics cohort.
Rotman Market Simulation Challenge (Trading Competition): Finished 10th place out of 46 teams.