

FRANCESCA CHANNON

EDUCATION

Imperial College London <i>MSc Statistics</i>	2022 – 2023
▪ Research project on 'Stochastic Volatility Modelling and Forecasting of Financial Data.'	
Imperial College London <i>MSc Applied Biosciences and Biotechnology (Merit)</i>	2020 – 2021
Warwick University <i>BSc Mathematics (First Class Honours)</i>	2017 – 2020
Brighton College A-Levels: Mathematics (A*), Further Pure Mathematics (A*), Biology (A) ▪ Mathematics Advanced Extension Award (Merit) GCSEs: 13A*	2013 – 2017

WORK EXPERIENCE

J.P. Morgan Private Bank <i>Alternative Investments Analyst</i>	July 2021 – October 2022
▪ Alternative Investment Analyst covering Europe and the Middle East region. ▪ Part of the team responsible for advising clients on the construction and implementation of Alternative Investments. ▪ Responsibilities included data analysis, financial modelling, and portfolio construction, management, and optimisation. ▪ Experience programming in Python a portfolio construction and optimisation program for Alternative Investments.	
J.P. Morgan Private Bank <i>Sustainable Investment Due-Diligence Summer Analyst</i>	July – August 2020
▪ Worked directly under the Global Head of Sustainable Investment Due Diligence to assist in fund manager selection and ongoing due diligence of the Sustainable Investment platform.	
Tellus Matrix <i>Junior Quantitative Analyst</i>	June 2019 – June 2020
▪ Worked part-time as a Junior Analyst on a retainer throughout the 2019/20 academic year. Here, I learned about systematic trading strategies and portfolio optimisation. ▪ As part of a project, I researched and created algorithms in Python based on simulated annealing (SA) methods to solve combinatorial optimisation problems over an n-dimensional discrete grid. ▪ This inspired me to dedicate my third-year research module of my undergraduate degree to the application of SA to classical NP-hard combinatorial optimisation problems.	
Phoenix Asset Management <i>Summer Quantitative Equity Research Intern</i>	August – September 2017
▪ Creating a set of models to predict the correlation between demographics and returns on capital. ▪ I applied K-means cluster sampling, advanced Excel VLOOKUPs, PivotTables and Solver models, confidence intervals and two tail t-tests to large demographic data. ▪ This model was used to decide which stores to research to gain a representative insight into the whole company based on chosen demographics, confidence levels, location, and cost efficiency.	

The Royal Marsden

Intern Summer Biomathematician

August – September 2016

- My role was to sort gene expression data based on p-values and test statistical significance of biochemical properties to predict future strains of breast cancer. This was a great experience applying statistical modelling to biology.

ADVANCED QUANTITATIVE SKILLS AND EXPERIENCE

- 5 years' experience using Python in various contexts. Experience in managing large datasets and using Python for portfolio optimisation and statistical finance, including risk management.
- Proficient in Machine Learning and Deep Learning using libraries like TensorFlow, NumPy, pandas, and SciPy.
- Proficient in R programming for statistical computing and data analysis. I have expertise in improving designs, diagnostics, and model selection techniques for accurate analysis and interpretation of data and building predictive models using data.
- Proficient in MATLAB. Basic Java, C++ programming.
- Strong knowledge of probability and statistics.
- MSc Applied Biotechnology and Biosciences Dissertation: *Machine Learning for the prediction of viral batch infectivity*.
- BSc Mathematics Research projects: *Elliptic Curve Cryptography; The application of Simulated Annealing to classical NPhard-combinatorial optimisation problems*.

HOBBIES & INTERESTS

- Advanced dressage rider competing nationally and winning the British Dressage Medium Level Regional Finals.
- Competed on the Brighton College and Sussex County hockey teams.
- In the last two years, I have enjoyed kitesurfing.
- Advanced PADI Diver.
- Recreational skier.