

## **FRANCESCA CHANNON**

### **EDUCATION**

#### **Imperial College London**

**2022 – 2023**

##### *MSc Statistics*

- Research project on 'Stochastic Volatility Modelling and Forecasting of Financial Data.'

#### **Imperial College London**

**2020 – 2021**

##### *MSc Applied Biosciences and Biotechnology (Merit)*

#### **Warwick University**

**2017 – 2020**

##### *BSc Mathematics (First Class Honours)*

#### **Brighton College**

**2013 – 2017**

##### *A-Levels: Mathematics (A\*), Further Pure Mathematics (A\*), Biology (A)*

- Mathematics Advanced Extension Award (Merit)

##### *GCSEs: 13A\**

### **WORK EXPERIENCE**

#### **J.P. Morgan Private Bank**

**July 2021 – October 2022**

##### *Alternative Investments Analyst*

- 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**

**July – August 2020**

##### *Sustainable Investment Due-Diligence Summer Analyst*

- 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**

**June 2019 – June 2020**

##### *Junior Quantitative Analyst*

- 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**

**August – September 2017**

##### *Summer Quantitative Equity Research Intern*

- 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.