# REAGAN PRINCE

24 Newlands Road  $\diamond$  Woodford Green  $\diamond$  IG8 0RU 07523867738  $\diamond$  reagan.prince@hotmail.com

# **PROFILE**

I thrive in challenging situations and thoroughly enjoy dealing with complex problems. From a young age, I have linked this passion with mathematics, and have now decided to pursue a career that will allow me to continue to work with numbers, and problem solve. I would also like to obtain a professional qualification, like ACCA, or CFA, while I work. Hopefully, this will allow me to pursue a career in finance and technology.

## **SKILLS**

- R, Python, Matlab
- Microsoft Excel- vlookups, pivot tables, ...
- Bayesian Statistics

- Linear Regression
- K-means
- Decision tree

## **EDUCATION**

# University of Bristol

2014 - 2018

Master in Science (MSci) with First Class Honours in Mathematics

second year average: 71.9%, third year average: 79.8%, fourth year average: 77.1%

## Relevant modules:

- Financial Mathematics (achieved 79%): I have a good understanding of the pricing of financial derivatives and can apply these ideas to a variety of option contracts. An example of this is my knowledge of how to derive the Black-Scholes option pricing formula. This course has enabled me to develop my mathematical modelling skills and enhanced my problem-solving abilities.
- Monte Carlo Methods (achieved 82%): I am capable of implementing multiple algorithms in R, in order to solve scientific problems, including Bayesian analysis. I am also able to justify theoretically the use of the various algorithms encountered.
- Spectroscopy Project (achieved 75%): This project was on nonparametric regression, with applications in spectroscopy. I researched the "Kernel Regression Estimator", and the more modern "Taut String Method", to find a method of removing noise from spectroscopic data, and automatically obtain relevant information from the graph. I then wrote R code to implement these methods and assess their performance.
- Randomized Load Balancing Project (achieved 74%): In this project I researched multiple algorithms for distributing tasks, as they arrive at a server network. I used my knowledge of probability to prove theoretical bounds for each method, then I used R to simulate these algorithms, for large datasets, and show the accuracy of these bounds.

#### Other relevant modules:

- Applied Probability 2
- Statistics 2
- Stochastic Optimisation

- Ordinary Differential Equations 2
- Applied Partial Differential Equations 2
- Complex Networks 4

A Levels: Mathematics (A\*), Physics (A), Chemistry (A)

GCSEs: Mathematics (A\*), Statistics (A\*), Information Technology (A\*), Physics (A\*), Chemistry (A\*), Science B (A), Biology (A), French (A), Physical Education (A), Religious Studies (A), English Literature (B), and English Language (B)

# WORK EXPERIENCE

# Technical Systems UK

2016 -Present

Engineer

- · Manufacture parts for machinery.
- · I explained how to operate our bagging machines as well as their safety procedures to clients.
- · Installation and delivery of large machinery.

# Trinity Catholic High School

September 2013 - June 2014

Tutor

- · Provided assistance to secondary school students who struggled with maths.
- · Ran group sessions for 3 students, where I designed activities to engage the students.

# Mohindra and Co Chartered Accountants

December 2011

Accountant

- · Maintained financial records of a client's daily transactions.
- · Designed an easy to read table layout, in Excel, to make record keeping more efficient.

## OTHER

Squash- I was an active member of the Squash society in the University of Bristol, where I attended weekly training sessions.

I am a regular user of Kaggle.com.

I have a full clean driving licence.

# REFERENCES AVAILABLE ON REQUEST