

EDUCATION

University of Oxford | Christ Church

MSc Mathematical & Computational Finance

- Sep 2016–Jul 2017
- *Thesis*: Reinforcement Learning in the Algorithmic Trading Domain
 - *Relevant Coursework*: Stochastic Control, Algorithmic Trading, Market Microstructure, Advanced Financial Data Analysis, Optimisation, Machine Learning and Financial C++

University of Surrey

First Class Honours in BSc Financial Mathematics

- Sep 2012–Jul 2016
- Achieved cumulative grade: 91%
 - Dissertation: The Mathematics of Financial Derivatives 97%
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|----------------------|-----------------------------------|------|--------------------------------|-----|
| Relevant Coursework: | Bayesian Statistics | 100% | Corporate Finance | 98% |
| | Operation Research & Optimisation | 98% | Partial Differential Equations | 92% |
| | Mathematical Statistics | 91% | Stochastic Processes | 91% |
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RESEARCH PROJECTS

Algorithmic Trading & Computational Investing

Collaborative Research

- Automating trading system for Forex and combining trade signals with reinforcement learning using Python

Statistics & Financial Data Analysis

Individual Research

- Analysed and created models for house prices, weather, Forex and stocks using Splines, ARIMA and GARCH

Information and Feedback Processing

Summer Research Assistant

- Collaborated with Cognitive Neuroscience Professor, was responsible for data analysis and algorithm optimisation

PROFESSIONAL EXPERIENCE

Commerzbank AG

Summer Internship | Quantitative Analyst | London

- Jun 2015–Sep 2015
- Validated structure of exotic equity derivatives
 - Wrote efficient VBA routines and compiled supporting material to optimise daily tasks

Lloyds Banking Group

Placement Year | Data/Risk Analyst | London

- Jun 2014–Jun 2015
- Data mining, outcomes testing, random forests and automating daily routines
 - Developed an outcomes testing model for mortgages utilising random forests in SAS
 - Designed and implemented a risk assessment toolkit later utilised by the Risk Division

Bloomberg LP

Aug 2014 | Short Internship | Sales & Analytics | London

Raiffeisen Fund Management

Aug 2013 | Off-Cycle Internship | Investment Analyst | Budapest

FINANCE & DATA SCIENCE INITIATIVES

Surrey Economics & Finance Society

Sep 2013 – Jul 2016 | Investment Executive (2015–16)

Stanford University

Machine Learning Summer Workshop by ICME | Stanford, CA

- KNN • SVD • K-means & hierarchical clustering • PCA • NMF • SVM • CART • NN • Text Classification

Coursera & Udemy

May 2012 – Present | Individual Studies

- Machine Learning by Stanford University with 99.6% • Recurrent Neural Networks • Deep Reinforcement Learning
- Asset Pricing by The University of Chicago with distinction • ConvNet • Cluster Analysis • NLP
- Computational Investing by Georgia Institute of Technology with 100% • Black Algo Trading

AWARDS

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|------|----------------------|---------------------------------------|
| 2017 | University of Oxford | Full Blues Award |
| 2016 | University of Surrey | BSc Financial Mathematics (RSA) Award |
| 2016 | University of Surrey | Highest Graded Dissertation |
| 2015 | EFS | Elected Investment Executive |
| 2014 | University of Surrey | The Mathematics Department Prize |
| 2014 | Bloomberg LP | Best Speaker in Debate on Investments |

PROGRAMMING SKILLS

- | | |
|----------------|-----------------------------------|
| Proficient: | • Python |
| | • R |
| | • C++ |
| | • MATLAB |
| | • VBA |
| Familiar with: | • L ^A T _E X |

ACTIVITIES & INTERESTS

Basketball

Oxford Blues Team (OU) | Varsity Team Captain (SU) | Hungarian Premier League (ZTE)

Interests

Short Sprints (100 & 200m), Shot Put, Snowboarding, Volleyball, MMA, Poker, Chess and Rubik's Cubes