Gábor Bakos

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11 Botley Road, Oxford, OX2 0AA, United Kingdom

Education

University of Oxford | Christ Church — **MSc Mathematical & Computational Finance**

Sep 2016–Present
- *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–Jun 2016
- Highest cumulative grade in both Mathematics and Economics Departments with *91%*
- Dissertation: The Mathematics of Financial Derivatives *97%*

Relevant Coursework:

Bayesian Statistics	*100%*	Corporate Finance	*98%*
Operation Research & Optimisation	*98%*	Partial Differential Equations	*92%*
Mathematical Statistics	*92%*	Stochastic Processes	*91%*

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 complied 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 and deep learning
- 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**

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

2017	University of Oxford	Full Blues Award
2016	University of Surrey	BSc Financial Mathematics 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
2013-15	University of Surrey	Surrey Top Achievers (Awarded Three Times)

Programming Skills

Proficient:
- Python
- R
- C++
- MATLAB
- VBA

Familiar with:
- LaTeX
- OCaml

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