

Oskar John Hollinsworth

Curriculum Vitae

About Me

- Final year, **Mathematics, Trinity College, Cambridge**, specialising in probability, analysis and statistics
- Extensive coding experience, for example writing:
 - an online app for playing Catch Phrase
 - solutions to Project Euler problems
 - a program which allows you to practise market making options
- Programming languages:
 - Object Oriented Programming, mostly in **Python**, also in C++ and JavaScript
 - web development in HTML/CSS
 - typeset lecture notes, mathematical projects and documents like this one in \LaTeX
- Maths Tutor, Debater and Public Speaker
- Volunteer First Aider: coordinate first aid cover at events, teach first aid and Treatment Centre Manager at a May Ball with attendance of 800
- Effective Altruist: raise money for data-backed charities, President of Trinity Effective Altruism and Digital Content Officer for 80000 hours
- High achiever at school; each year my school gave out prizes to one student out of 300 - I was awarded 10 including for Outstanding Student of the Year, Mathematics and Science

Qualifications

- First class achieved in Part IB Mathematical Tripos (79%), Senior Scholarship awarded by Trinity College
- First class achieved in Part IA Mathematical Tripos (80%), Junior Scholarship awarded by Trinity College
- S1S in STEP (Sixth Term Examination Papers)
- 3 A* grades in Mathematics, Further Mathematics and Physics at A2 level
- 7 A grades at AS level
- 11 A* grades and 1 A grade at GCSE

2015 **STEP I**, S (Outstanding).
Cambridge Entrance Paper

2015 **STEP II**, 1 (Very Good).
Cambridge Entrance Paper

2015 **STEP III**, S (Outstanding).
Cambridge Entrance Paper

2015 **Mathematics**, A*.
A Level

2015 **Further Mathematics**, A*.
A Level

2015 **Physics**, A*.
A Level

2014 **Chemistry**, A.
AS level

2014 **History**, A.
AS level

2014 **Critical Thinking**, A.
AS level

2013 **Religious Studies**, A.
AS level

2013 **Extended Project**, A.
Dissertation and presentation

Experience

- 2017 **Assistant Trader Internship (10 weeks)**, *Susquehanna International Group*, Dublin.
Carried out a project on the Index Arbitrage desk researching a trading strategy. Acquired my own data from Bloomberg to back-test the strategy using Python's scientific stack. Given freedom to devise and test my own investment strategies based on the historical market patterns which I observed. Presented findings and advice for implementing the strategy to a group of senior traders including the head of trading. Participated in pit trading simulations and a poker league. Studied ETFs, options, game theory, Excel/VBA, and SQL.
- 2016 **Centre for Pathogen Evolution (10 weeks)**, *Zoology Department*, Cambridge University.
Selected to undertake an individual research project to resolve issues regarding unexplained parameter estimates in the linear regression of antigenic distance from amino acid substitution data. Designed novel algorithms using NumPy, pandas and matplotlib which are in active use by the research group. Helped to identify the most important genetic changes affecting the evolution of human influenza virus in order to prepare vaccines targeted to strains which we predict to evolve next.
- 2014 **AIG Science Team**, *European Headquarters*, London.
Shadowed the Quantitative Analysts, Quantitative Developers and Data Scientists who use statistics to optimise the selection process of the most profitable Broker Distribution Managers