# JOSHUA ACTON

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## **EDUCATION**

**University of Bristol** Bristol, UK *September 2021 – July 2024* 

BSc (Hons) Mathematics and Computer Science

- Grade (Expected): First Class Honours
- Honours: Awarded the Bristol PLUS award, fewer than 5% of students achieve this each year
- Courses: Real Analysis, Metric Spaces, Linear Algebra I, Algebra I, Probability I & II, Statistics I & II, Algorithms I & II, Data-Driven Computer Science, Imperative & Functional Programming, Object-Oriented Programming, Programming Languages & Computation
- Additional: Self-teaching courses in ODEs, PDEs, multivariable and stochastic calculus

# The King's School Chester

Chester, UK

5 A-Levels, 10 GCSE/IGCSEs

September 2014 – July 2021

- A-Levels: Mathematics (A\*), Further Mathematics (A), Physics (A\*), Computer Science (A\*)
- A-Level Extended Project "Will machine superintelligence benefit humanity?" (100%, A\*)
- GCSEs/IGCSEs: 6 grade 9, 3 grade 8, 1 grade 6, including Mathematics and English Language
- UKMT Senior Mathematics Challenge (Gold), NPLQ Generation 9 (qualified pool lifeguard and first aider)

## **WORK EXPERIENCE**

City of London, UK **Goldman Sachs** 

Summer Analyst

June – September 2023

Accepted an offer to join the Market Risk team as a 2023 Summer Analyst

**University of Bristol** Bristol, UK

Student Helper

January 2023 – Present

Representing the School of Computer Science at open days and panel sessions for offer-holders and applicants

# **University of Bristol Banking & Investment Society**

Bristol, UK

Quantitative Analyst

October 2022 – Present

Learning about the quantitative finance industry through seminars and developing a cryptocurrency marketmaking bot

## **Flintshire County Council**

Flint, UK

Data Entry Clerk

June – September 2022

- Input sensitive information into a custom database requiring high attention to detail to recognise anomalies
- Processed over 400 forms resulting in the team's summer workload being completed one month early

**Optiver** Remote

Spring Insight Participant

April 2022

- Received training in financial markets, option theory, market making, and trading system design
- Placed 3<sup>rd</sup> in a team competition to develop and execute a delta-neutral cross-exchange arbitrage strategy

**University of Bristol** Bristol, UK

Telephone Fundraiser

March – April 2022

- Established and maintained strong relationships with over 400 Alumni
- Raised over £2000 to support a variety of scholarships

## Susquehanna International Group

Remote

Spring Insight Participant

March 2022

Developed my understanding of probability, statistics, and game theory in financial markets through workshops, talks and games with SIG team members

# **Medicines Discovery Catapult**

Chester, UK

Machine Learning Research Intern

*July – October 2020* 

Implemented a novel machine-learning approach in Python to translate images of organic chemical compounds in medical research papers into standardised 'SMILES' strings

#### **TECHNICAL PROJECTS**

Personal portfolio webpage written in HTML, CSS, JavaScript

## LEADERSHIP EXPERIENCE

# **University of Bristol Cycling Club**

Bristol, UK

Vice-Captain for Road Cycling

September 2022 – Present

- Co-ordinated design and procurement of custom club kit for the 2023 season
- Organised a week-long summer trip to France for 30+ club members, managing accommodation and transport

## The King's School Chester Rowing Club

Chester, UK

Vice-Captain of Boats

*September 2020 – July 2021* 

- Rowed in the school 1st VIII at a national level including Henley Royal Regatta and National School's Regatta
- Represented the views of athletes within the club and volunteer coached younger athletes in school holidays

# **SKILLS & INTERESTS**

Linguistics English (native), self-studying Dutch & German

Programming Python, R, C++, Java, C, Haskell, HTML, CSS, JavaScript, Git

Certifications Bloomberg Market Concepts 91.4%, Python and Statistics for Financial Analysis (Coursera)

Interests Black swan events, existential risk, military history, chess, poker, geopolitics

Sports Road cycling, distance running, powerlifting, Formula One