Arthur Robertson

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Education

University of Bath *Sep 2022 – Jul 2025 (Expected)*

BSc (Hons) Computer Science and Mathematics, Predicted **First**, achieved in year 1.
- **Relevant Modules**: Programming 1 (**90%**), Programming 2: (**92%**), Artificial Intelligence (**82%**)
- Achieved an average grade of **90%** across all coursework assignments.

Christ the King College, Isle of Wight *Sep 2015 – Jul 2022*
- **A Levels**: Mathematics (**A***), Further Mathematics (**A***), Computer Science (**A***)
- **GCSEs**: 3 9s, 5 8s, 3 7s

Achieved **91%** and **89%** in the A Level Mathematics and Further Mathematics papers respectively, and **73/75** marks in the A Level Computer Science coursework project. Received the Mathematics Achievement Award.

Experience

Bloomberg L.P. | **Insight Programme** | London *Aug 2023*
- Recipient of the Career Skills Bursary, an Engineering insight programme which included a week at the office in London.
- Gained an insight into the day to day life of a software engineer, and the skills required to succeed in the industry
- Led a group project to conceptualise a way to geographically visualise M&A transactions. I developed a working prototype application in 2 days using Python and JavaScript, which we presented to a group of employees.

HSBC | **Technology Insight Programme** | London *Jul 2023 – Sep 2023*
- Attended a series of virtual events and an in person week at the headquarters, gaining an understanding of the technology division of the bank and how it operates, and insight into software engineering in a financial institution.

Bridgepoint Group | **Insight Week** | London *Jul 2023*
- Gained a broader perspective of the private equity industry and the financial services sector as a whole.
- Enhanced quantitative and communication skills through a group project, evaluating a company's financial performance and presenting findings to investment director.

Words&Stuff | **Website Developer (Part Time)** | Isle of Wight *Sep 2020 – Sep 2022*
- Assisted in the development of multiple websites, including complex eCommerce platforms and booking systems.
- Responsible for designing, deploying, and maintaining client IT infrastructure, using AWS and other cloud services.
- Investigated client site performance issues, improving loading times up to 10x by utilising caching and other techniques.

Projects

M&A Visualisation App | *Python, JavaScript, SQL* | Blog Post
- Developed a full stack prototype application for visualising Merger and Acquisition transitions across the globe, based on ideas from the Bloomberg insight week. Successfully presented to a group of employees with a live demonstration.

Genetic AI Blackjack Agent | *C++* | Blog Post
- Created a genetic algorithm to train an AI agent to play Blackjack, achieving the theoretical max win rate within 500 generations. Used techniques such as crossover, mutation, and tournament selection to evolve the population.

Cryptocurrency Sentiment Analysis App | *Python, JavaScript, SQL* | Blog Post
- Built a full stack application to investigate the link between social media sentiment and cryptocurrency price.

Activities

Cybersecurity: Discovered a variety of vulnerabilities in web applications, including a vulnerability in Apple Inc.
Insight Events: Attended events at Goldman Sachs, Nomura, and BGC Group, gaining insight into the different roles within finance and the day to day life of an employee.
UNIQ, **Sutton Trust**: Completed a Mathematics Summer School at the University of Oxford and University of Cambridge.
AmplifyMe: Came 1st of 100 participants for total Profit and Loss in an Asset Management Simulation.

Skills

Languages: Proficient: Python. Intermediate: JavaScript, Java, C/C++, SQL.
Libraries: NumPy, Pandas, Flask, FastAPI, React, NextJS
Tools: Git, AWS, Linux, Heroku, Vercel, Docker, Excel
Interests: Cricket, Squash, Trumpet, Drums, DJing