

Alex Riddell-Webster

<https://alexr-w.com>

3rd year Computer Science student at Cambridge University

Education:

Cambridge University, Murray Edwards College (2020-)

Studying towards a BA in Computer Science

Key modules this year include Principles of Communication, Quantum Computing, Cybercrime, Cryptography, and dissertation ('A MANET to Facilitate Collision Avoidance in Rowing Boats')

The Godolphin & Latymer School (2012-2020)

- **A-levels:** Physics (A*), Computer Science (A*), Mathematics (A*) and Further Mathematics (A)
- **Extended Project Qualification:** 'Card Counting in Blackjack - How Accurately Can a Computer Predict the Result of a Game?' (A*)
- **GCSEs:** 12 subjects with ten top grades (2017 grades were a mixture of alphabetical and numerical grades), top grades included Computer Science, Mathematics, Advanced Mathematics Qualification, History, Design Technology; two grade 7s (equivalent to an A)

Key Skills and Competencies:

Programming

I program in Python, Java, C, C++, Prolog, JavaScript and HTML / CSS.

In my second year, myself and a team of other Computer Scientists created Stravian, a progressive web app (PWA) to help the British Ornithology Society advertise themselves and Greater Spotted Eagles. I used JavaScript and React to create the front end of our PWA and interface with the backend.

My final year dissertation is titled 'A MANET to Facilitate Collision Avoidance Between Rowing Boats' and focusses on routing messages between Raspberry Pi Picos using the delay-tolerant protocol Epidemic. This uses MicroPython and CircuitPython, alongside C++ to run a series of nodes containing a Pico, radio (RFM69) and GPS.

Time management

I have built these abilities from balancing the academic pressures of a Cambridge degree with extra-curricular activities, particularly training towards the Oxford Cambridge boat race.

Teamwork and Communication

Rowing has taught me how to work with a team towards a common goal and communicate effectively. Attending and giving talks at the Churchill Computer Science Talks series ('Technical Insights into 5G - Design and Intentions') has improved my communication skills. Multiple customer service jobs have built up my people management and communication skills.

Previous Employment:

2021:

CCLA Investment Management: Summer internship, working in a team to investigate labour abuse in supply chains, countries, and different working economies. At the conclusion of the internship we presented our findings to the investment team to inform portfolio decisions.

Brooklyn Pizza Crew: Working as the front of house, working with multiple discrete takeaway apps and collaborating with the rest of the restaurant's team.

2020:

Tutoring: Teaching 12 year old twins Mathematics and Sciences in an engaging and interactive way over an eight week period while their school was closed due to lockdown.

2018:

St Thomas' Hospital: Work experience with the hospital Pharmacy's IT team and in the main Trust IT department.

Ramboll: Work experience in the London office, working with electrical and structural engineers.

Other Interests:

I represented Great Britain twice as a J18 rower. I have continued rowing, winning the 2021 and 2022 Oxford Cambridge Blondie-Osiris (Reserves') Boat Races. I am currently training towards the 2023 Oxford Cambridge Boat Race. The commitment and discipline that rowing demands has developed my teamwork, time management skills and resilience in high pressure environments.