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### Education

# Trinity College, University of Cambridge Engineering BA and MEng Expected 2027

Grades: 4th out of 323 in University of Cambridge and 1st in Trinity College for Part IA (799/900)

2024

Elected Senior Scholar and received the Garrett Fund Prize, for exam performance

# 53rd International Physics Olympiad

2023

Silver Medal — 55th out of 400+ contestants (64%)

1st in the UK for the British Physics Olympiad Round 3 and NPL Theoretical Physics Prize

# Nottingham High School

2023

4 A\* in Further Mathematics, Mathematics, Physics and Chemistry

Distinction in British Mathematics Olympiad (33/60) and full marks in the Senior Maths Challenge Gold in the UK Chemistry Olympiad Round 1 (84%)

Qualified for the International Chemistry Olympiad UK team selection camp

# **Experience and Projects**

### **Snake Game**

Project September 2024

- Wrote a 500 line OOP-based implementation of the popular game Snake in C++
- Stored data through extensive use of the STL. Used OpenGL for rendering game graphics
- Included several features into the UI, such as togglable help prompts.

Sepal AI Remote

### Consultant — Physics Specialist

August 2024

- Solved and wrote 8 advanced physics questions for an AI reasoning evaluation dataset
- Streamlined objectives with client AI lab via reviewal feedback loops

# **British Physics Olympiad**

Oxford

# Lecturer

April 2024

- Delivered a 2 hour lecture on AC theory to the top 14 students in the British Physics Olympiad
- Wrote 20 pages of mathematically rigorous supplementary notes with LATEX
- Tutored a student who subsequently qualified for the International Olympiad of Astronomy and Astrophysics UK team selection camp

### Orbyts AGN Research Paper

Nottingham

### Student Researcher

October 2022 – April 2023

- Identified composition of AGN outflow winds by processing and fitting data of emission spectra from the XMM Newton X-ray telescope using Python
- Delivered a final presentation detailing theory, results and conclusions
- Submitted analysis to the Astronomy Theory, Observations and Methods Journal

### Societies

### Cambridge University Space Flight

Cambridge

### CAD Modelling

October 2023 - December 2023

- Developed a CAD model of the CUSF rocket nosecone using SolidWorks
- Built a mock-up of the nose cone, which was used in sponsorship events

## Trinity College Engineering Society

Cambridge

### Freshers' Representative

October 2023 – Present

- Engaging first year engineers in the college discourse and being a voice in committee
- Organised several social events for first years to network with senior years

### Skills

**Technical:** Python, C++, OpenGL, STL, SolidWorks 2022, LATEX **Language:** English (Native fluency), Chinese (Conversational fluency)