Youyou Yu

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Education

Imperial College London — London, UK
Masters of Science in Physics - Currently achieving a 2:1 — *Sep. 2024 – Jun. 2028*

Work Experience

Early Careers Actuarial Conference — September 2025
Aon, The Aon Centre, The Leadenhall Building, 122 Leadenhall Street — *London, UK*

- Gained insight into actuarial modelling techniques and their application in insurance, pensions, and risk management.
- Learnt how emerging risks such as climate change and longevity impact actuarial decision-making.

Global Payment Solutions + Introduction into Quants + Capital Markets insight — September 2025
Bank of America Offices, 2 King Edward Street — *London, UK*

- Learned about Bank of America's Global Payment Solutions and Capital Markets' divisions and their role in facilitating international transactions and gained insight into innovations shaping the payments industry.
- Privately invited back to gain further insights within the industry due to successful performances at the insight event.

Sky finance insight event — August 2025
Sky Headquarters, Grant Way, Isleworth — *Middlesex, UK*

- Gained valuable exposure to the company's financial operations, insights into career pathways within finance, and a clearer understanding of the skills and attributes required to succeed in the industry.

Projects

Radio telescope project | *Python* — Sep. 2023 – Dec. 2025

- Constructed a 1.8m diameter radio telescope using aluminium beams and chicken wire to read the radio waves into usable data.
- Built a base using wood and other materials to be able to rotate the telescope along both the azimuthal and polar directions
- Visualised radio data from the Hydrogen Line at 1440MHz in the Milky Way to map particularly dark areas, where visible light telescopes would fail.
- Wrote a statistical program and used real-world data to predict the graph shape that would be expected in Python to compare the accuracy of my telescope and how to further improve its design and detection ability.

Quantum optics research project | *Python* — Mar. 2025 – Jun. 2025

- Proposed idea to verify whether a single incident photon on a beam-splitter would only take one of two available paths.
- Constructed a circuit consisting of a single photon source (pulsed LED) with collimators and neutral density filters to reduce photon count to measurable quantities.
- Used silicon avalanche photodiodes connected to an oscilloscope to verify photon readings being incident only on one device for each.
- Conducted statistical analysis using Python to predict proportion of photons expected at each photodetector based on estimated loss variables.

Technical Skills

Coding Languages: Python, SQL, HTML
Developer Tools: Microsoft Office, VS Code, Visual Studio, Spyder
Languages: Fluency in both English and Mandarin, GCSE level French
Communication and Debating skills: Represented Imperial at international debating competitions at Copenhagen.

Interests

Optics and Quantum Physics modelling
Quiz, History, Algorithmic Trading, Venture Capital & Private Equity, Cauchy Capital societies
Archery and Bouldering