
Education

- PhD in Aeronautics and Astronautics** (Ongoing) 2024 -
Massachusetts Institute of Technology
- MEng Aeronautical Engineering with a Year Abroad (1st class honors)** 2020-2024
Imperial College London, Massachusetts Institute of Technology (final year)
- Achieved an overall grade of 80% (GPA 5.0). Awarded: BAE Systems Prize for best individual research project, 'Aeronautics Scholar' award, and Dean's List (x4) for performance in top 10% of cohort
 - Sponsored by the Institution of Mechanical Engineers (IMechE) 'James Clayton' Undergraduate Scholarship
- A-Levels in Maths, Further Maths, Physics, Product Design (A*, A*, A*, A*)** 2018-2020
Peter Symonds' College
- Authored a grade A* extended project qualification on the future of ion propulsion for air and space transport

Experience

- Student Partner** 10/2024 -
Giant Ventures
- Identifying and referring exceptional ventures to a global firm focused on technology, health, and climate
- Graduate Student, Aeronautics and Astronautics** 08/2024 -
Massachusetts Institute of Technology
- Developing physics-based simulation tools for lightning strikes to unconventional aircraft
 - Shared work with industry through presentations, papers, and participation in the SAE AE-2 committee meeting
- Summer Intern, Simulation & Modeling** 06/2022 - 08/2022
MBDA Missile Systems
- Evaluated and implemented an alternative programming paradigm in a high-fidelity dynamic model
 - Identified a solution to a long-term project which protected company IP while meeting client requirements
 - Verified change sets, utilizing more than 2,000 core-hours on an industrial high-performance cluster
- Undergraduate Researcher (UROP)** 06/2021 - 08/2021
Imperial College London, Dr Sylvain Laizet (Supervisor)
- Implemented and profiled a novel C++ framework for high-performance heterogeneous computing
- Lead Aerodynamics and Simulations Engineer** 10/2020 - 08/2023
Imperial College London Rocketry, Altitude Record Team
- Conducted computational fluid dynamics (CFD) studies on high-powered supersonic rockets using StarCCM+
 - Negotiated sponsorship with ESTECO, acquiring licenses to modeFrontier optimization software
 - Integrated modeFrontier into engineering workflows, increasing rocket altitude by 3% and breaking a UK record
- Duty Manager** 03/2020 - 01/2021
The Food Warehouse, Basingstoke
- F1inSchools Alumnus, Judge, and Event Volunteer** 2017 -