Nathanael **Jenkins**

+44 7960 264 171
+1 857 639 0610
naj20@mit.edu

Education

PhD in Aeronautics and Astronautics (Ongoing) 2024-
Massachusetts Institute of Technology, Cambridge USA

MEng Aeronautical Engineering with a Year Abroad (1st class honours) 2020-2024
Imperial College London, Massachusetts Institute of Technology (final year)

- Achieved an overall grade of 80%, consistently in the top 10% of cohort
- Worked with the MIT Aerospace Plasma Group to develop physics-based simulation tools for aircraft lightning strikes, under the sponsorship of The Boeing Company
- 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, Winchester UK

- Authored a grade A* extended project qualification on the future of ion propulsion for air and space transport

Experience

Graduate Student, Aeronautics and Astronautics 08/2024 -
Massachusetts Institute of Technology, Cambridge USA

- Developing physics-based simulation tools for aircraft lightning strikes with the support of The Boeing Company
- Recipient of MIT School of Engineering Graduate Fellowship (2024)

Summer Intern, Simulation & Modelling 06/2022 - 08/2022
MBDA Missile Systems, Stevenage UK

- 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, utilising more than 2,000 core-hours on an industrial high-performance cluster

Undergraduate Research Opportunity 06/2021 - 08/2021
Department of Aeronautics, 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
Altitude Record Team, Imperial College London Rocketry, London UK

- Conducted computational fluid dynamics (CFD) studies on high-powered supersonic rockets using StarCCM+
- Negotiated sponsorship with ESTECO, acquiring licenses to modeFrontier optimisation software
- Integrated modeFrontier into engineering workflows, increasing rocket altitude by 3% and breaking a UK record

F1inSchools Alumnus, Judge, and Event Volunteer 2017 - present