Nathanael **Jenkins**

Education

MEng Aeronautical Engineering (current) 2020 - 2024
Imperial College London

- Successfully completed first year studies achieving results equivalent to first class honours
- Awarded a position on the 1st year 'Dean's List' after attaining a grade in the top 10% of the cohort

A-Levels (A*, A*, A*, A*) 2018 - 2020
Peter Symonds College, Winchester

- Produced a grade A* extended project qualification (EPQ) investigating the feasibility of ion propulsion of spacecraft and aircraft
- Networked with subject experts at RAeS, QinetiQ and Purdue University whilst conducting Extended Project research
- Established time-management skills by maintaining a high standard of work whilst studying 4 A-Levels and an Extended Project

10 GCSEs, grades 7-9/A* 2012 - 2018
Robert Mays School, Odiham

- Achieved grade 9 in seven subjects including Mathematics and Physics, and grade A* in Engineering

Experience

Undergraduate Research Opportunity | 'GPU Parallelisation of a 2D Navier-Stokes Solver' 06/2021 - 08/2021
Imperial College London, Department of Aeronautics, Dr Sylvain Laizet (Supervisor)

- Successfully delivered a C++ solver using SYCL to enable accelerated computation on heterogeneous systems
- Developed an extensive understanding of high-performance heterogeneous computing, particularly GPU offloading
- Utilised industry-leading tools in the Intel oneAPI HPC Toolkit, including use of the vtune profiler for deeper offloading analysis

Aerodynamics & Simulations Engineer 10/2020 -
Imperial College London Rocketry, Altitude Record Team

- Led the aerodynamics sub-team, using advanced computational methods to develop and test proposed rocket designs
- Demonstrated self-motivation by dedicating time to online fluid dynamics lectures to correctly apply 3D polyhedral meshing and compressible flow physics with real gas models in transonic and supersonic external flows
- Extended use of CFD beyond the scope of undergraduate studies, using StarCCM+ and SU2 on complex computational domains

Duty Manager 03/2020 - 01/2021
The Food Warehouse, Basingstoke

- Promoted from general assistant to duty manager within 5 months, having played an integral role in the opening of this new store
- Confidently managed busy store periods, with total responsibility for store operations, safety and security

General Assistant 10/2018 - 02/2020
The Mill House, Odiham

Work Experience Placements 07/2017 - 08/2018
NATS Southampton, AECOM Basingstoke, Miller Hare London

- Enhanced commercial awareness through experience in three engineering companies, each with unique goals and challenges

Achievements

IMechE James Clayton Undergraduate Scholar 2020 - 2024

Arkwright Engineering Scholar 2018 - 2020

- Recognised as a future leader in engineering by the Southampton University Faculty of Engineering and Physical Sciences

Formula 1 in Schools Alumnus, Judge and Event Volunteer 2017 -

- Achieved 5th place at the 2017 World Finals in Kuala Lumpur, Malaysia, out of 51 global teams
- Inspire the next generation of engineers by mentoring current teams in engineering and professional skills
- Committed to judging at Regional and National Finals, since 2019
- Volunteered at 2020(21) World Finals, preparing teams from across the globe for live-streamed interviews

Student Affiliate, The Royal Aeronautical Engineering Society 2020 -
Student Affiliate, Scholar, The Institute of Mechanical Engineers 2018 -

Software & Tools

SolidWorks
StarCCM+
Fusion360
C++
MATLAB
oneAPI
Khronos SYCL

References available upon request

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