

WILLIAM COLOHAN

07503819850 | billy.colohan@outlook.com | <https://www.linkedin.com/in/william-colohan> | Sheffield, UK

EDUCATION

UNIVERSITY OF SHEFFIELD

Aerospace Engineering (Private Pilot Instruction) MEng

Sept 2024 – Present

- Achieving a **First** in all modules, including Modelling & Systems, Electrical Fundamentals and Aerospace Materials, with a **96%** in **MATLAB** programming
- Awards:** Professional Behaviours Team Award for best presentation – Global Engineering Challenge, **Electrical Design Application Award** for capacitor circuit design

THOMAS ROTHERHAM COLLEGE

A-Levels in Physics (A), Mathematics (A*), Computer Science (A), EPQ (A*)*

Sept 2022 – June 2024

- Awards:** Computer Science Subject Award as the **top achiever** in college, High achiever award (**Top 5%** of college)

EXPERIENCE

JD WETHERSPOON

Team Leader

July 2022 – Present (Promoted April 2025), Previously Kitchen Associate

- Promoted to lead, train, and support a team of kitchen staff during service periods and set-up/ close-down tasks
- Refined Back of House cleaning checklists to prioritise important tasks, driving a **10% improvement** in audit scores

THOMAS ROTHERHAM COLLEGE

Academic Tutor

November 2023 – February 2024

- Facilitated weekly mathematics review sessions for year twelve students, focussing on integration, statics and statistics

PROJECTS

PROJECT SOLOTRON – Hydrogen Combustion Engine Development

Combustion Chamber Team Member

October 2025 - Present

- Conducting **CFD** (ANSYS Fluent) to analyse hydrogen-air combustion and temperature distribution within the chamber
- Performing **FEA** (ANSYS Mechanical) to validate structural integrity of the chamber under high thermal loading
- Applying thermodynamic principles and aerospace-grade material selection to ensure a high factor of safety
- Tasked with reducing knocking by optimising **thermal management**, chamber geometry, fluid dynamics and turbulence
- Collaboration** with multidisciplinary teams, delivering presentations and assisting others with Fusion CAD development

ROBOT BUGGY

Systems & Control Lead

September 2025 – December 2025

- Designed an autonomous navigation system for a robot buggy using **Simulink** and **Tinkercad**
- Achieved a **20% reduction** in test completion time by iterative simulation and validation, optimising control logic

QUADCOPTER REDESIGN

Structures Lead

September 2025 – January 2026

- Redesigned a quadcopter frame achieving a **10.3% mass reduction** with a **factor of safety of six** for crash landings
- Enhanced structural integrity and end-of-life disposability through strategic material selection and FEA simulations

DECARBONISING COMMERCIAL AVIATION – Engineering You're Hired

Team Lead

February 2026

- Led a multidisciplinary team proposing electric taxiing and regenerative braking, reducing the 2-17% fuel burn in taxiing

SKILLS

- MATLAB (96%), Simulink, ANSYS Fluent & Mechanical (CFD/ FEA), Fusion (5 years' experience) & FEA, C/C#, Arduino, Rapid Prototyping & 3D Printing, Material Selection, Technical Presentations, Leadership & Management