

📍 Southampton, UK
☎ +44 7393 357570
✉ mathiaspotter0605@gmail.com
🌐 linkedin.com/in/mathias-potter

🌐 mathiaspotter.co.uk

About Me

Final-year MEng Aeronautical and Astronautical Engineering student at the University of Southampton (graduating June 2027), targeting high-performance and motorsport engineering. Strong foundation in CAD, FEA and CFD across the full design cycle, from concept and simulation through to manufacture and testing, backed by three engineering placements spanning rotor sail aerodynamics, marine structures and software delivery. Competitive sailor representing GBR, bringing composure under pressure and a high-performance mindset.

Technical Skills

- CAD: SolidWorks, Autodesk Inventor, ANSYS Workbench
- ANSYS Fluent, Star-CCM+ (CFD)
- Python (NumPy, SciPy), MATLAB, LaTeX, Excel (Macros/VBA)
- Software: Git/GitHub, AI-assisted development workflows
- Smath, MS Office, general workshop skills

Additional Skills

- Formula Student – Aerodynamics Dept. (front wing CFD)
- RYA Dinghy Instructor & First Aid
- Grade 8 Lambda (Acting) Distinction

Languages

- English (Business Level)
- French (Fluent)
- Spanish (GCSE)

Mathias Potter

*Final Year MEng Aeronautical & Astronautical Engineering Student
University of Southampton*

Relevant Project Work

4th Year Group Design Project (Self-Proposed): MotoGP Cornering Aerodynamics

- Co-authored and proposed a novel research project on MotoGP cornering and lean-angle aerodynamics (45–60° lean), a regime largely unknown in public literature, then recruited a 6-person team to deliver it (approved for 2026/27).
- I am now project lead, responsible for technical direction, work allocation and delivery across the full academic year. Uses a 50%-scale wind-tunnel model with rolling-road, lean and yaw capability.

Self-Directed Project: F1 Lap-Time Simulator & Setup Optimiser

- Built a quasi-steady-state lap-time simulator with a setup optimiser in Python, validated against real F1 telemetry (FastF1) to within 1.25% on lap time, and recommended correct real-world wing setups per track.

3rd Year Individual Project: Retroreflective PIV for Aerofoil Flow Measurement

- Validated a retroreflective PIV technique for flow measurement around a thick aerofoil with a Gurney flap, resolving coherent velocity fields with reasonable agreement to conventional PIV and published literature. Obtained a 1st.

2nd Year Group Project: Fixed Wing UAV

- Overall Project Manager. Led the structural design of the wing from CAD and FEA-supported decisions through to manufacture of the wing and gimbal system, culminating in successful flight test. Obtained a 1st

Experience

Engineering Intern – Argo Engineering Solutions

06/2026 – 07/2026

- Produced engineering drawings and CAD models for marine structures, combining design work while gaining hands-on practical and workshop experience.

Engineering Intern – ANEMOI

06/2025 – 09/2025

- Supported aero and structural projects for rotor sail systems, developing MATLAB-based tools to process experimental data and support installation and sail calibration.
- Analysed rotor sail performance data for engineering and commercial teams, and produced CAD models, drawings and engineering documentation for multidisciplinary projects.

Software Engineer – Meraki Group

08/2026 – 09/2026

- Delivered multiple client-facing CRM systems and rebuilt the company's main internal and external hub, shipping to production in a two-person team via a GitHub branch-and-review workflow with AI-assisted development.

Sailing Instructor (RYA & Private)

05/2020 – Present

- Instructed RYA youth stages 1–4 and private national level race coaching, teaching both practical skills and in-depth theory to maximise learning opportunities for all levels.

Education

MEng Aeronautical & Astronautical Engineering

09/2023 – 06/2027

(expected)

University of Southampton, UK — on track for a High 2:1 / 1st

- Final year modules: Race Car Aerodynamics, Applications of CFD, Experimental Methods for Aerodynamics, Turbulence, Advanced Aerospace Engineering Management.
- Earlier relevant modules: Advanced Aerodynamics, Digital Aerospace (CFD & FEA), Aero-thermodynamics, Control, Engineering Design, Materials & Structures, Mathematics.