Yifan Xia
Cambridge, UK | +44 07419-281511 | yx394@cam.ac.uk

EDUCATION

University of Cambridge, Cambridge, UK Jun, 2027
Meng in Engineering
Relevant Coursework: Compressible and Incompressible flow, Thermodynamics, Mass and Heat transfer
*Ranking:*5/323 in the first year, 23/316 in the second year

Ulink College Shanghai, Shanghai, China Jun, 2023
Awards: British Physics Olympiad(BPhO) global super gold

WORK EXPERIENCE

Hyatech, *New Product Introduction engineer*, Wuxi, Jiangsu Jul 2025-Sep 2025
- Supported NPI integration and introduction of compressor blades for Safran and General Electric, contributing to on-time completion of assigned NPI milestones.
- Constructed CAD model of three blade types, reduced communication time between engineering team and production floor by 20%.
- Guided blade refinement processes by automating CMM and NDT data analysis and visualization in Python, replacing manual inspection with batch processing and improving efficiency by 200×.

Beijing Benz Automotive Co., Ltd, *Quality engineer***,** Beijing Jul 2024-Sep 2024
- Identified and analyzed quality issues in engine manufacturing, including VVT central valves, timing gears, flywheels, and pistons, preventing potential failures in 20+ engines.
- Contributed to the development and programming of a camera gate inspection system, enabling automated quality checks for ~200 engines per day.

PROJECT EXPERIENCE

Cambridge University Space Flight, *Propulsive team member*, Cambridge Oct 2023-Present
- Engineered engine contours using SolidWorks and Rocket Propulsion Analysis (RPA), designing cooling channels to satisfy thermal and structural constraints.
- Designed and constructed the engine test bench, applying FEA to verify structural integrity and operational reliability.
- Coordinated with testing facilities and component manufacturers to ensure readiness of the test bench.

Inventi Bot, *Structural Engineer*, Cambridge Jan 2024-Apr 2024
- Designed the robot's overall frame and gripping mechanism, ensuring proper integration of the main control board and motors within tight space constraints.
- Developed the structure in SolidWorks, validating component interfaces at the assembly level, and applied Motion simulation to verify kinematic compatibility while reserving clearance for rapid on-site modifications.
- Completed the full design-to-fabrication cycle in two weeks, creating schedule margin for testing and integration.
- Contributed to the team's First Place finish at the Unibot Competition.

Ulink Aerospace Club, *Propulsion Team Leader*, Shanghai Aug 2021-Jun 2024
- Co-founded the aerospace club and led the propulsion team, coordinating with airframe and avionics subsystems to meet integrated system requirements.
- Designed, built, and tested prototype gas turbines and ducted fan assemblies, gaining early experience in the design–build–test engineering cycle.

SKILLS AND INTERESTS

- *Additional projects:* 3D-printing rigidity analyzation software; Panel method lift evaluation software
- *Technical Skills:* Python, C++, Fortran, Fluent, CFX, SolidWorks, Catia, 3D-printing, Manual Turning and Milling
- *Interests:* 3D-printing; Hiking; Motorcycle Touring