Yiwei Wang

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EDUCATION

09/2020 – 07/2025 **The University of Nottingham, Ningbo China**
Bachelor of Engineering in Aerospace Engineering
Expected Grade 75, First Class Honors degree

CORE MODULES AERO 2005 Control of Aerospace Systems (87); AERO 1000 Aerospace Design and Materials (75); AERO 2003 Dynamics and Flight Mechanics (70), etc.

RESEARCH EXPERIENCE

06/2024-08/2024 **Faculty of Science and Engineering, UNNC, China**
Prototype Development of a 3 Degree-of-Freedom Parallel
Research Assistant to Dr Donglei Sun

- Responsible for building a model of a 3-degree-of-freedom parallel actuator based on existing research, especially from the book *Robot Modelling and Control*
- Designed the trajectory of the actuator by drawing on knowledge of statistics and dynamics, gaining knowledge about robot modelling and control
- Applied theoretical knowledge in control of aerospace systems, and dynamics and flight mechanics to solve a practical problem

06/2023 – 08/2023 **Faculty of Science and Engineering, UNNC, China**
Multidisciplinary Design Optimization of Propeller Performance and Noise Project
Research Assistant to Dr Richard Amankwa Adjei

- Modelled the propeller design using SolidWorks
- Carried out CFD analysis using Ansys, specifically CFX and CFD (Fluent) to simulate the different blade performances of the vehicle
- Gained knowledge of control principles

01/2023 – 05/2023 **The Control Lab, UNNC, China**
Tail-Sitter Vertical Take-Off and Landing (VTOL) Drone Project
Research Assistant to Dr Salman Ijaz

- Applied control theory to enable the drone to operate successfully in the main phases of flight (take off, landing and cruise)
- Used principles of UAV electronic control system and Simulink software to stabilize the flight of the drone

09/2022 – 12/2022 **Advanced Manufacturing Centre, UNNC, China**
Design of 5 Axis Industrial Cutting Machine Project
Research Assistant to Prof Haonan Li

- Liaised with company to determine project requirements
- Gained knowledge of integrated circuits while working on the project
- Integrated C programme for automating the probes object detection and tilt angle
- Demonstrated excellent communication skills when speaking to various teams within the company

EXTRACURRICULAR EXPERIENCE

12/2024– 05/2024 **ASME K-16/IEEE EPS 2024 Design Competition, United States**
Team Member, directed by Dr Yi Nie and Dr Shanshan Long

- Led my team to design an efficient heat sink, achieving a runner-up award
- Carried out CFD analysis to optimise the design and incorporated design features to allow the component to be 3D printable

ADDITIONAL INFORMATION

AWARDS - Runner Up: ASME K-16/IEEE EPS Heat Sink Design Competition held in the US

PUBLICATIONS - 'Surrogate-based multifidelity: Robust optimization for ducted fan blade aerodynamic design', published at a MEAE IEEE conference, 2024

LANGUAGES - English (fluent), Chinese (native)

IT SKILLS - MATLAB, Ansys, C, C#, SolidWorks, 3DExperience, Python, Visio, Adobe, Gasturb, Mission Planner, Gambit

INTERESTS - GO, Robotics, Basketball

SCHOLARSHIP -2022-2023 Dream Scholarship for UNNC Chess Club of the University of Nottingham, Ningbo China