

Education

September 2023 - August 2024

MSc Robotics

The University of Manchester

Expected grade: 1st

- Deepening my understanding in robotic manipulators, control of electro-mechanical systems, systems design, and programming.
- Leading a Robotic Systems Design Project team of four students; developing timelines, assigning tasks and managing the collaborative work of the group.
- Volunteered for the position of student representative for the cohort; facilitating discourse between students and academic staff members.

September 2019 - July 2023

BEng (Hons) Aerospace Engineering

The University of Manchester

Overall grade: 1st

- Achieved First class in Data Acquisition & Experimental Methods, Modelling & Simulation, Tools for Engineers, Structures, and Conceptual Aerospace Systems Design.
- Undertook an Industrial Placement Year at the UK Astronomy Technology Centre focusing on metal additive manufacturing.
- Demonstrated resilience throughout the Covid-19 pandemic and handled numerous deadlines and projects.
- Practiced teamwork and leadership in projects; developed better English communication skills.
- Received the Top Student Award in first and third year.
- Was an active member of the Manchester Satellite Development Group, International Society and Aerospace Society.

September 2018 - June 2019

BSc Mechanical Engineering

Budapest University of Technology and Economics

- Was introduced to the basics of engineering through lectures, laboratories and tutorials.
- Exited the course early to commence studies in the UK.

September 2010 - July 2018

Jedlik Ányos Secondary Grammar School, Budapest

- A-level equivalent qualifications: Mathematics (A), Physics (A), English (A).

Relevant work experience

July 2022 - June 2023

3D Printing Industrial Placement Student

UK Astronomy Technology Centre - STFC

- Was part of the AM4Space research group within the UK Astronomy Technology Centre (UK ATC).
- Conducted research into the design for additive manufacturing of deployable mirrors, resulting in a lightweighting of 44% compared to the original design and the consolidation of 9 parts into a single one.
- Gained experience with engineering software such as Autodesk Inventor and Vault, Ansys Mechanical, nTopology.
- Presented findings to lay and professional audiences within the UK ATC and to a professional audience on the Workshop on Freeform Optics Applications & Manufacturing for Astronomy & Space Missions in Chiang Mai, Thailand.
- Wrote a conference paper for the 2023 SPIE Optics + Photonics conference which was orally presented by the project supervisor.

September 2021 - July 2022

AAS CanSat Competition 21/22

- Conducted technical interviews of ten candidates from various backgrounds.
- Led the mechanical sub-system, designed components and mechanisms, performed component and material selection.
- Compiled accurate documentation for Preliminary and Critical Design Reviews.
- Led the manufacture and assembly of the CanSat payload and container.
- Performed fine-tuning of FDM 3D printers and slicer settings to assure the desired quality and mass properties of additively manufactured components.
- Influenced critical decisions and provided technical support on the lunch day.
- The team competed in the final stage of the competition in Virginia, USA, and placed 15th out of 50 teams.

October 2020 - June 2021

AAS CanSat Competition 20/21

- Fulfilled the role of the Integration & Testing Engineer and Mechanical Sub-system Engineer.
- Made critical structural and mechanical design decisions, designed components and mechanisms in SolidWorks, managed the FDM 3D printing of components and sub-system and system level integration & testing. Also, held a workshop on mechanical design for the UK CanSat competition teams.
- Conducted AM design and slicing optimization which resulted in an overall 15% weight reduction of the components whilst using a denser filament type. Testing showed that all components performed as expected.
- Was selected as one of the four juries for the UK CanSat competition.
- The team achieved the 4th best place based on the design reviews and the 24th place overall.

Other work experience

October 2019 - June 2022

Part-time Bar Staff, Wine and Wallop, Manchester

- Worked as a barman and a barback 15 hours during academic years.
- Developed further communication skills and excellent time management skills.
- Improved quick problem-solving and situation-assessing skills under pressure.

Awards

Top Student Award Year 1

This award is given to the top 5 students in the 1st Year of the Aerospace Engineering course at The University of Manchester.

Top Student Award Year 3

This award is given to the top 5 students in the 3rd Year of the Aerospace Engineering course at The University of Manchester.

Instant Recognition Award

Was nominated for the Instant Recognition Award at the UK ATC for volunteering to hold engineering related educational activities for two work experience students during my industrial placement year.

Additional skills

- Proficient in the use of Microsoft Office and obtained a European Computer Driving Licence.
- Experience in engineering software: SolidWorks, MATLAB, Python, Arduino IDE, LabView, Ansys Fluent.
- Completed TRIZ problem solving and Design for Metal Powder Bed Fusion trainings.

Interests & Activities

I like being active and do many sports such as mountaineering, swimming and volleyball. I am hoping to get into mountain biking and paragliding in the next couple of years.