Mahmood El-Mahalawy

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EDUCATION

University of Birmingham (MEng Mechanical Engineering)

Sep 2021 - Present

First Year Average: 1st Class - 73%
Second Year Average: 1st Class - 71%

The Nottingham Emmanuel School Sixth Form

Sep 2019 - July 2021

• A-Levels (3): Maths (A), Biology (A*), Physics (A)

The Nottingham Emmanuel School

Sep 2014 - July 2019

GCSEs (11): Arabic (A*), Further Maths (A), Biology (9), Physics (8), Chemistry (8), Maths (8)

WORK EXPERIENCE

University of Nottingham | Summer Internship

Summer 2023

- Researched and conducted a techno-economic analysis of different zero & low carbon fuels for the next generation of heavy-duty internal combustion engines.
- Gained hands-on experience with IC engine testing in a research environment at the University.

Royal Mail | Mail Sorter

April 2020 - Present

- Successfully balanced both university studies and part-time employment
- Learned to work in a fast paced environment and agile to business needs
- Conducting checks of each item, adhering to instructions in a logical manner
- Improved communication and teamwork skills during busier seasons of the year

GoStudent | Tutor

Sep 2022 - Present

- Demonstrated expertise in maths and science topics, aiding students in understanding complex concepts
- Balanced part-time employment along my university studies

ACHIEVMENTS AND EXTRACURRICULAR ACTIVITIES

Coding | Web Development

- Presented expertise in web development by creating multiple websites, including a portfolio website that showcases a diverse range of skills and accomplishments
- Dedication to continuous learning and improving coding skills, frequently practicing in spare time and collaborating on both individual and group projects..
- Passionate about coding, consistently looking for new chances to improve and create digital solutions.

Duke of Edinburgh | Bronze Award

Sep 2017 - June 2018

- Planned and completed a 3 day expedition in a group which improved teamwork skills
- Invested time learning Spanish independently as a skill so that it could help me in my studies and allow me to communicate to a wider range of people

University of Cambridge | HE+ Award

Sep 2019 - March 2020

- Attained a place on this highly regarded development programme with aims to increase progression to top universities and improve academic achievement
- Conducted research and created a presentation on a topic in particle physics which helped build my confidence in speaking to large groups

Basketball | Team Member

- Balanced engineering coursework and exams with regular basketball practice, highlighting strong organisational skills
- Regular member of a competitive basketball team, improving teamwork skills and effective communication

SKILLS

Coding:

Skilled in languages such as Python, HTML, CSS, JavaScript, SQL and C; consistently practice and improve these in free time by working on individual and group projects

• MATLAB:

Used MATLAB's functionalities to enhance design workflows and achieve project goals

• Fusion 360:

Experienced in Fusion 360 and incorporate it into projects every semester to demonstrate my design capabilities

• Design Projects:

Demonstrated proficiency in engineering design through the successful completion of multiple projects spanning over the past two years, showcasing adaptability in both individual and group settings. Design projects include:

- O Designing a miniature 2-stroke IC engine to be used in a UAV for exploration.
- o Designing a water desalination plant in Uruguay to provide enough water for a quarter of the population.
- Designing and building a wooden bridge using truss analysis that successfully withstood over 1000N downward force.