LOUIS FLINN

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Biography :

Highly motivated MSc Human and Biological Robotics student at Imperial College London, eager to make a positive impact in healthcare and robotics.

EDUCATION

Imperial College London Oct 2023 - Sept 2024

MSc Human and Biological Robotics

Grade: (Provisional) Distinction

University of Manchester Sept 2020 - June 2023

BEng Mechatronic Engineering

Grade: First Class Honours

Brampton College Jan 2018 - June 2019

A Level Results: Physics - A*, Maths - B, Philosophy - B

Haberdashers' Boys School Sept 2008 - Jan 2018

GCSE Results : 4 A*'s (Physics, Chemistry, Biology, English Literature), 5 A's, 1 B

WORK EXPERIENCE

LA Vending

Mechatronics and Legal Consultant July 2023 - Jan 2024

Assessed engineering design failures, suggested appropriate design changes and drafted legal documents for a refund claim on faulty vending machines that were sold to LA Vending. Recouped £65,000 for the company that otherwise would have been lost.

The RSA Group July - August 2019

Research Assistant

Evaluated candidate suitability and created shortlists for bio-pharmaceutical companies seeking new talent, refining communication skills.

TWG Events August - August 2021

Bar Staff

Delivered exceptional customer service in a high-intensity environment, balancing customer and company interests.

WSP May - June 2017

Work Experience Program

Participated in Civil Engineering tasks, focusing on sustainable solutions in design, water and waste management, lighting and project competitions.

EXTRACURRICULAR AND LEADERSHIP EXPERIENCE

Hardware Manager Sept 2021 - May 2022

Managed hardware development for an autonomous line sensing microcontroller-based buggy. Utilising SolidWorks for chassis design and materials testing. Gearbox and motor characterisation. Construction of the buggy. PCB and component testing and soldering. Equitable delegation of tasks to the members I was in charge of and making modifications in response to testing whilst time pressured. This experience improved my leadership skills and enforced the importance of prioritising the team over the individual. Leading my team to 2nd place out of 55 groups.

Physics Olympiad

One of 4 high performing students selected to compete in the Physics Olympiad for my school, this motivated me to approach problems that were more advanced than the school curriculum and find novel solutions using self-taught content.

Cancer Research - Volunteering for 4 hours every Sunday working on the shop floor and serving customers.

Team Sports - Rugby team captain, hockey and waterpolo teams. Developed my teamwork and organisational skills along with interpersonal relationship and dynamic management.

Individual Sports - Competed at a national level in swimming, cross country and athletics. Ranked 4th in the UK for pole vault at the National Track and Field Championships.

Cryptocurrency and Stock Trading - I am passionate about the underlying technology that supports cryptocurrency and the future of the blockchain and web 3.0, I am currently teaching myself Solidity to write DApps on the Ethereum Blockchain. I also invest in and trade stocks in response to market conditions.

Other Skills:

Proficient in CAD software such as SolidWorks and Shapr3D. Apt at simulation and data processing using MATLAB/ Simulink. Experienced in control system and embedded system programming in C and C++. Hands on experience with electronics, including circuit design, prototyping and testing.

Mechatronics Advisor Navil Ltd

Advised on the mechatronic design and shortcomings of a batch of ‘high tech’ vending machines that the company had acquired. My knowledge in mechatronic system design and navigation of the legal precedent surrounding the issue resulted in the recuperation of £65,000 that the company otherwise would not have recovered.

Quasi Direct Drive gripper for dexterous manipulation

Designing and building a two finger quasi direct drive, field oriented control, torque controlled gripper for fine grained dexterous manipulation. Aiming to reduce the discrepancy between robotic intelligence and robotic dexterity at a low cost.

Manual to Electric Wheelchair Conversion Kit: Repurposed hoverboard motors and batteries and added custom motor drivers, control and firmware to create a functional electric conversion kit for a manual wheelchair, reducing the cost compared to similar products by 90%