MAX MCCORMACK

Engineering Student at Imperial College London

📞 44 7586 294227   ✉ max.mccormack21@imperial.ac.uk

📍 London, UK   in Linkedin

SUMMARY

I am a versatile engineer with a passion for problem solving. Currently pursuing a Master of Engineering (MEng Design Engineering) at Imperial college London, I am enthusiastic about combining engineering and creative thinking to implement projects that achieve technical goals through elegant design.

SKILLS

Rapid Prototyping, Human Factors, Machine Learning

TECHNOLOGIES

Ansys, Fusion360, Excel, Matlab, SQL, C++, PyTorch, NumPy, Pandas

EXPERIENCE

Jun 2024 - Present **ML Engineering Intern | HotelMap**
- Utilising and combining advanced ML techniques and automation frameworks such as LLM Agoras, NER and LangChain to develop intelligent software robots that automate elements of the corporate event room booking pipeline.
- Developed and implemented three key software modules currently in active use.
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Machine Learning  /  NLP  /  Python
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Jun-Aug 2023 **Undergraduate Robotics Researcher | Morphlab**
- Robotics research lab at Imperial College London specialising in soft robotics and embodied intelligence.
- Designed and tested, virtually and physically, a novel spring system for a passive variable stiffness knee exoskeleton joint. Optimised geometry with generative design. Co-authored two papers based on our findings.
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Finite Element Analysis  /  Python  /  CAD
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Jun-Aug 2022 **Quantitative Research Intern | Graham Capital Management**
- Connecticut Hedge Fund with $25B AUM specialising in providing alternative quantitative and discretionary alpha opportunities across a variety of markets.
- Worked closely with a portfolio management team. Mainly tasked with data processing and idea generation. Developed GARCH-type model specifications to help model event-driven volatility with Python.
- Wrote P&L meter scripts to monitor rates positions in real time.
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Python (Numpy, Pandas, Quantstats)  /  Excel  /  SQL
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Oct-Dec 2021 **R&D Intern | FIRE1**
- Dublin biotech startup developing a heart failure early warning sensor implant.
- Later returned to help complete a data driven element of the sensor using computer vision techniques.
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C++  /  Python  /  Machine Learning  /  CAD
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EDUCATION

2021 - 2025 **Imperial College London | Master of Engineering, Design Engineering**
Fusing advanced technology with design thinking in a highly creative and entrepreneurial master's degree. Topics include Computing, Product Development, Customer Discovery, Machine Learning, and Robotics. Achieved a 1st in my first and second year.

2007 - 2021 **St. Michael's College, Dublin**
Irish Leaving Certificate: 8xH1's

2019 - 2020 **Dublin City University**
Early University Entrance Programme in Electronic and Materials Engineering

2019-Present **Online courses**
I am a serial online learner, having completed many online and in-person courses such as Harvard's Computer Science 50 (CS50) and Imperial College London's Mathematics for Machine Learning

ACHIEVEMENTS

2022 **Imperial College London Irish Society**
Refounded the college Irish Society in 2021, and have led them as president since. Also active in the Athletics, Ski, Philosophy, Algorithmic trading, Alt Music, and Film Societies

2021 **Irish Leaving Certificate (A level equivalent)**
Studied 8 subjects rather than the normal 6, and scored top 5 in the country out of 80,000 students.

2020 **National 400m Finalist, Irish National u23 Championships**
I ran on behalf of Crusaders AC for 6 years and coached the u16s Middle Distance Team

2019 **Highly Commended, BT Young Scientist**
For a project on near-visible light communications