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| **Maxwell Catmur** | Location: London, UK | LinkedIn: linkedin.com/in/maxwell-catmur-1475a2209 |
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**Profile**

Physics graduate with a strong foundation in analytical problem-solving, data analysis, and programming. Proven skills in project management and data processing, with experience in SQL database management and product innovation. Seeking to leverage my skills in a Mechanical Engineering role at Bosch, emphasizing Hydraulic Motors and Mobile Hydraulics.

**Education**

**MPhys Physics – University of Warwick** 2022-10 – 2026-07

UK

* Achieved a consistent passing mark, modeling orbit stability with Python to integrate data analysis techniques.
* Completed a Master's project on magnetostriction in quantum spin ice, showcasing advanced analytical techniques.
* Modeled finite difference methods to solve partial differential equations in C.

**A-levels – Forest School** 2020-09 – 2022-07

UK

**Work Experience**

**Summer Intern – RF Seekers – MBDA UK** 2024-06 – 2024-08

Stevenage, UK

* Accomplished an 85\% reduction in MATLAB algorithm runtime, enhancing processing speed.
* Collaborated effectively to develop an app for performance evaluations, increasing team efficiency.
* Expanded knowledge in radar imaging, demonstrating adaptability and advanced technical proficiency.

**Project Manager – University of Warwick Aerospace Society** 2024-09 – 2025-07

Coventry, UK

* Led meetings and delegated roles, streamlining communication within the team for timely project execution.
* Oversaw assembly of a ground communication station, ensuring compliance with satellite requirements.
* Managed the development of a MATLAB model for a university CubeSat ground station, improving project outcomes.

**Research Assistant – Finite Difference Methods – University of Warwick** 2025-06 – 2025-10

Coventry, UK

* Modelled wave propagation using finite difference methods, optimizing for computational efficiency.
* Analyzed multiple schemes in MATLAB, achieving balance between accuracy and computational effort.
* Presented research findings through a well-received poster at an academic event.

**Projects**

**AI CV Generator**

* Developed a tailored OpenAI API-driven solution, enhancing document personalization.
* Designed a Latex formatter integration, streamlining document preparation processes.
* Delivered improved functionality for users, simplifying CV and cover letter creation.

**Drinks Ordering Web App**

* Engineered a real-time web app system, seamlessly processing hundreds of orders.
* Utilized Ajax for order status updates, significantly improving customer experience.
* Received positive feedback, illustrating practical application and user engagement improvements.

**Skills and Interests**

Languages: Python, MATLAB, C, SQL, JavaScript

Libraries: NumPy, SciPy, SqLite, Matplotlib

Tools: Microsoft Office, Git, GitHub

Soft Skills: Analytical thinking, Teamwork, Communication, Problem-solving

Interests: Machine learning, Amateur radio, Tennis, Chess