Lara Merican

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Design Engineering student experienced in structuring complex challenges, synthesising insights, and developing strategic frameworks across product, sustainability, and data projects, with a strong curiosity for learning across diverse domains.

Education

Imperial College London Sep. 2023 – Jun. 2027
MEng Design Engineering *South Kensington, London*

- **Achieved First Class grades in Years 1 & 2; Dean's List 2023–24**
- I-Explore Module: Corporate Finance (Merit)

Concord College Sep. 2021 – Jun. 2023
A-Levels & AEA *Acton Burnell, Shrewsbury*

- A-Levels: Mathematics, Further Mathematics, Chemistry, Physics (**A*A*A*A***)
- AEA: Mathematics (**Distinction**)

Projects

Stride (Assistive Device for Parkinson's Patients) | *ClickUp, Figma, Arduino Nano* May 2025 – Jun 2025

- Led team operations and electronics development as **Project Coordinator**, managing workstreams in ClickUp with a **hybrid Agile–Gantt approach** to deliver **3 stages of iterative prototypes**
- Scoped and delivered **7 key milestones** (sensor calibration, ergonomic fit, haptic feedback integration), balancing technical feasibility with user-centred needs
- Synthesised insights from **5 Parkinson's patients and 3 clinical experts**, translating observations into design decisions that guided ergonomic testing protocols and system safety

FlexiCook (Smart Meal-Planning System) | *Figma, Arduino, Fusion 360* May 2024 – Jul 2024

- Led discovery and strategy, conducting **23 diary studies, 14 interviews, and 8 observations** to surface key pain points and define product requirements
- Synthesised findings into personas and journey maps, prioritising roadmap features via co-design workshops and **feasibility–impact frameworks**
- Validated design through **3 prototype iterations and a 32-user survey**, implementing high-value features (safety shut-off, cooking presets) that directly addressed user adoption drivers

Plane Crash Survivability Analysis | *Python, Pandas, scikit-learn* Jun 2024

- Applied **Random Forest** to aviation crash data (**28K records**), achieving **73% accuracy and 0.825 recall** via hyperparameter tuning and class balancing, identifying key survival predictors
- Engineered **interpretable features** from noisy Bureau of Aircraft Accident Archives variables, improving model reliability and highlighting water-based crash scenarios
- Translated complex crash site factors (e.g., ocean proximity) into clear, **pattern-based insights**, supporting broader safety analysis strategies and improving model interpretability

Experience

Independent Singer-Songwriter & Producer May 2021 – Present
Self-employed

- Directed release strategy, achieving **100K+ Spotify streams and 47K+ YouTube views**
- Managed remote creative collaboration with artists and engineers across **Sweden, Brunei, India, and the UK**

Undergraduate Teaching Assistant Oct. 2024 – Mar. 2025
Imperial College London *South Kensington, London*

- Facilitated weekly lab sessions for **100+ first-year engineering students**, simplifying complex concepts and **strengthening structured problem-solving skills**

Technical Skills

Analytical & Methods: Data Analysis (Pandas, NumPy, scikit-learn, Matplotlib), Feature Engineering, Roadmapping & Prioritisation, Feasibility–Impact Frameworks, User-Centred Research, Prototyping & User Testing
Strategy & Collaboration: Cross-Functional Teamwork, International Collaboration, Stakeholder Alignment
Design & UX: Figma, Adobe Creative Cloud, Fusion 360, Miro
Programming & Tools: Python, JavaScript, HTML/CSS, C/C++ (Arduino), React, Tailwind CSS