

ENOCH BALOGUN

Mechanical Engineering student | AI, energy delivery & practical impact

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PROFILE

First-year Mechanical Engineering student at Cardiff University exploring AI strategy, automation and energy delivery. I bring a systems-minded engineering approach to AI/impact questions: breaking down complex problems, testing ideas through projects, and focusing on tools that can improve learning, infrastructure and decision-making.

EDUCATION

Cardiff University - BEng Mechanical Engineering

Expected 2028 | Cardiff, UK

- Relevant study: mechanics, thermofluids, materials, design and manufacturing, computing, lab data analysis and technical reporting.
- Developing a strong engineering base while exploring how AI tools can support research, productivity and real-world infrastructure problems.

SELECTED EXPERIENCE & PROJECTS

AI Learning & Automation Projects

Self-directed | 2025-present

- Developed Lumious, a custom GPT-style learning assistant concept for planning, research, project work, weekly reviews and progress tracking.
- Experimenting with Make, structured prompting and AI-assisted workflows to turn learning content into repeatable systems rather than one-off notes.
- Prototyped a weekly AI newsletter digest workflow, reducing repeated manual summarising steps and creating a reusable study/research habit.

Energy Delivery & Infrastructure Research

Self-directed | 2025-present

- Explored electricity transmission, grid bottlenecks, curtailment, energy management and the operational challenge of getting energy from generation to people.
- Prepared an energy-delivery focused talk and used the topic to shape a clearer career direction around energy operations, project management and infrastructure impact.

Student Enterprise & Social Impact Projects

Cardiff student enterprise activities | 2026

- Developed WormCycle, a circular-economy concept converting organic waste into vermicompost and useful outputs such as fertiliser, worms, bait or feed.
- Awarded £350 through a student pitch/enterprise activity, providing early validation and forcing clearer thinking around users, costs and impact.
- Co-developed and pitched Sibalani/Sibol Ani, a concept supporting farming communities affected by dry-season challenges and agricultural instability.

Green Impact Project Assistant

Cardiff University | 2026

- Supporting university sustainability work through practical tasks, evidence management and team contribution within the Green Impact programme.

Engineering Design & Technical Analysis

Cardiff University coursework/projects | 2025-present

- Applied engineering methods across design work, lab analysis, robotics-related tasks, manufacturing choices and technical modelling using Python, MATLAB and Excel-style workflows.

CANDIDATE FIT

- Technical grounding from mechanical engineering, with a practical understanding of systems, modelling, data and design decisions.
- Self-directed AI learner building workflows, not just consuming content; uses AI tools to support study, research and project execution.
- Impact-focused interests across energy delivery, sustainability, agriculture and student enterprise.
- Comfortable communicating ideas through pitches, technical reports and presentations.

SELECTED OUTCOMES

- Awarded £350 in student enterprise funding for an impact-oriented pitch.
- Built an AI learning system concept with modes for learning, research, projects, planning and progress tracking.
- Created repeatable automation ideas for newsletter summaries, study workflows and research organisation.
- Defined a career direction focused on energy delivery and infrastructure rather than energy generation alone.

TOOLS & SKILLS

AI & automation: LLM workflows, structured prompting, Make, custom GPT design, research workflows

Engineering analysis: Python, MATLAB, Excel, lab data, technical reports, modelling, systems thinking

Energy & sustainability: energy delivery, grid bottlenecks, circular economy, Green Impact, infrastructure

Communication: pitching, presentations, technical writing, teamwork, project planning

BEST EVIDENCE FOR AI/IMPACT

- Connects AI interest with engineering and energy problems rather than treating AI as a standalone trend.
- Has early proof of initiative: independent projects, pitching, sustainability work and automation experiments.
- Shows a clear learning trajectory toward AGI strategy, responsible AI use and practical technical contribution.