



Exciting [Faraday Undergraduate Summer Experience \(FUSE\)](#) paid internship opportunities for summer 2026.

Studying a STEM degree? Wondering what career to pursue? Interested in finding out more about the battery sector? Keen to spend time with a dynamic community of pioneering battery researchers seeking to find solutions to support a fully electric future?

The Faraday Institution is offering a total of 48 internships, for undergraduate students to spend 8-weeks working on battery related projects.

Project title: High-Throughput Data Ingestion and Management Pipeline for Battery Digital Twins

Project description:

Battery management generates massive, high-speed streams of telemetry, but most current setups are only designed for after-the-fact analysis. To develop advanced battery control systems, labs need the ability to analyse and react to data the exact moment it is generated.

This internship focuses on building a fast, containerised pipeline designed specifically to enable in-the-loop control. You will build a backend that ingests raw telemetry, instantly filters out corrupt packets, and aggressively prioritizes a low-latency "hot lane" so machine learning models can consume the clean data immediately.

While the system will still log data securely, the primary goal is active, real-time integration. By upgrading the infrastructure to a scalable microservice architecture, you will provide the reliable backbone necessary for hardware-in-the-loop testing, dynamic predictive maintenance, and live Digital Twins that can interact with running experiments.

Supervisor: Amir Ali Panahi M.Sc., Dr. Billy Wu

University: Imperial College London

Location: In-person, South Kensington, London

Start date: The internship is a full-time role for 8 weeks during June-September. Start date is flexible, to be agreed with the project lead.

Eligibility:

- Be registered full-time undergraduate student from a UK university.
- Undertake the internship within the years of their undergraduate study (i.e., not in final year or during a subsequent Masters' programme).
- Not have been a FUSE intern in a previous year

Funding:

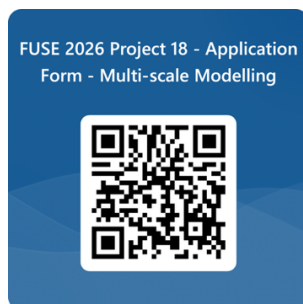
A tax-free stipend of £12.85/hour will be provided. This will be determined by the working address of the appointee, not the university's location. The funding is provided by the [Faraday Institution](#).

Additional activities:

During the FUSE internship you will be able to attend Faraday Institution cohort events which will focus on a variety of topics to further develop your understanding of career opportunities in battery sector. At the end of the programme, you will be invited to share a poster about your work and prizes will be awarded.

Application:

In order to apply for a Faraday Undergraduate Summer Experience (FUSE) 2026 internship, you need to fill out the application form [here](#), or scan the QR Code below:



Please also complete this [survey](#) so we can keep you informed about future Faraday opportunities, including other FUSE internships that may need additional support with recruitment.

Diversity

The Faraday Institution is committed to creating a dynamic and diverse pool of talent for the fields of battery technology and energy storage.

You can read more about Imperial's commitment to Equality, Diversity and Inclusion here: <https://www.imperial.ac.uk/equality>.