

# Liam O'Sullivan

Junior Electrical Engineer



Limerick, Ireland · liam.osullivan@gmail.com · +44 7412 583 719 · linkedin.com/in/liamosullivan-ee

Electrical engineering graduate from the University of Limerick with an 8-month Co-op placement at an international power systems company. Contributed to the design and testing of **6 MV switchgear assemblies** during placement, and completed a final year project on solar microgrid control that achieved a grade of **78%**. Proficient in AutoCAD, MATLAB, and PLC programming with a **2:1 (67% average)** in Electrical and Electronic Engineering.

## Experience

Sep 2024 – Apr 2025

**Electrical Engineering Co-op Student**, Eaton Corporation, Limerick

Completed an 8-month cooperative education placement within the power distribution division.

- Assisted with the design and assembly of **6 medium-voltage switchgear panels** for industrial clients in Ireland and the UK
- Created **25+ electrical schematic drawings** using AutoCAD Electrical, adhering to BS 7671 and IEC 61439 standards
- Conducted **18 Factory Acceptance Tests (FATs)** including insulation resistance, high-voltage withstand, and protection relay verification
- Identified a wiring error during testing that prevented a potential **€15,000 warranty claim**

Jan 2024 – May 2024

**Student Lab Demonstrator**, University of Limerick, Limerick

Demonstrated electrical circuits and electronics lab sessions for second-year engineering students.

- Supervised **4 lab sessions per week** for groups of **20 students**, covering circuit analysis and microcontroller programming
- Marked **80 lab reports** and provided feedback within a 1-week turnaround

## Education

Sep 2021 – Jun 2025

**BE (Hons) Electrical and Electronic Engineering in Electrical and Electronic Engineering**, University of Limerick, Limerick  
Graduated with Second Class Honours, Grade I (**2:1, 67% average**). Programme accredited by Engineers Ireland.

- Final year project on MPPT control strategies for solar microgrids using MATLAB/Simulink, graded **78%**
- Relevant modules: Power Systems, Control Engineering, Electronics, Signals & Systems, Embedded Systems

## Skills

AutoCAD Electrical, MATLAB / Simulink, PLC Programming (Siemens S7), Circuit Design & Analysis, BS 7671 (IET Wiring Regulations), Switchgear Testing & Commissioning, Protection Relay Configuration, Electrical Schematic Drawing, Factory Acceptance Testing, Microsoft Excel & Power BI, Problem Solving, Technical Report Writing

## Certifications

Jul 2025 – Jul 2025

**Engineers Ireland Graduate Member**, Engineers Ireland

Jun 2024 – Jun 2024

**Safe Pass Health & Safety Awareness**, SOLAS

## Languages

English - Native, Irish - Basic (A2)

## Projects

Sep 2024 – Apr 2025

**Solar Microgrid MPPT Controller - Final Year Project**

Designed and simulated a maximum power point tracking controller for a 5kW solar microgrid.

- Modelled the system in MATLAB/Simulink, achieving **97.2% tracking efficiency** under variable irradiance conditions
- Compared **3 MPPT algorithms** (P&O, Incremental Conductance, Fuzzy Logic) and presented findings to a panel of 4 academics

## **Extra Curricular Activity**

*Sep 2022 – Jun 2025*

**Member - UL Engineering Society (Engsoc)**

Participated in **3 Engineers Ireland design challenges** and attended **10+ industry talks** over 4 years.