

- Second-year student pursuing a BSc/MSc in Immersive Software Engineering (ISE) at University of Limerick. Currently averaging **QCA 3.93/4.0**
- Active member of the UL IEEE Robotics student branch and the UL Consulting and Entrepreneurship Society committee.
- Awarded the Patch San Francisco fellowship, providing a fully funded opportunity to explore Silicon Valley's tech space.
- Experienced Software Engineer with a strong project portfolio and internship experience at leading companies, including Stripe and Analog Devices.

Education

2023 – 2027 **BSc/MSc in Immersive Software Engineering**
University of Limerick (current QCA 3.9/4.0)

Projects

Deep Metrics: Developed a full-stack application to seamlessly collect, store, and visualize device metrics in real-time. Implemented backend APIs in FastAPI for efficient data ingestion and management, integrated PostgreSQL storage with Supabase, and designed an interactive dashboard using React and styled-components.

Chessponage: Designed, assembled, and programmed a smart chessboard featuring ESP32-based electronics and Hall-effect sensors for real-time chess piece detection. Developed firmware on the ESP32 to transmit sensor data to a web API, enabling live chess analytics on the frontend. Completed as part of the Human-Computer Interaction module.

Other projects include: Bird classification neural network, sports club management web app, heart disease prediction model, GUI pizzeria game, taxi simulator, C++ Qt-based adventure game, JavaFX quiz game, and AWS cloud project.

2023 **Software Development Level 5 - 8 Distinctions**
Kerry College of Further Education and Training, Tralee

2017- 2022 **Irish Leaving Certificate - 613/625 points**
Presentation Secondary School, Milltown

Work Experience

Analog Devices International - Software Engineering Intern

September 2024 – December 2024

Redesigned the SmartMesh IP GUI applications. Created a dynamic mesh topology explorer webpage with a live updating topology and GUI features, such as mote search and a mote statistics panel. Contributed to an embedded monocular depth estimation research project. Trained a deep learning model to run on the MAX78000 CNN accelerator to estimate depth on edge devices.

Stripe - Software Engineering Intern

June 2024 – August 2024

Enabled PayTo as a Dynamic Payment Method and integrated it into Stripe Checkout and Payment Links, supporting real-time payments for Australian customers. Ensured a seamless Checkout experience for PayTo. Used Ruby for backend development and React for the frontend. Worked as part of the Aggregators team, collaborating extensively across multiple teams.

Consulting and Entrepreneurship Society UL - Web Designer/ Committee Member

September 2023 - Present

Developed an informational website for the Consulting and Entrepreneurship society as the lead web designer. Designed the website to be visually interesting and intuitive for users and deployed it using GitHub pages. Used to promote the society across UL.

Visit it here: <https://ulces.ie>

Personal Projects

Compact

Developed a chrome extension tool for contract analysis, allowing users to summarise selected contract text, and organize saved contracts in their dashboards. Highlights hidden clauses (e.g., renewals, fees) using OpenAI's completion API with secure proxy integration on Vercel. Utilized HTML, CSS, and JavaScript for the extension's frontend; the dashboard was developed with React and styled-components.

Skills

- Programming Languages: Java, Python, JavaScript, TypeScript, Ruby, C++.
- Web Development: CSS, React, RESTful APIs, Node.js, Django, Fast-API, styled-components, Next.js.
- Machine Learning: OpenCV, Pandas, Numpy, PyTorch, Scikit-learn.
- Tools: GitHub, VSCode, Postman, AWS, SonarQube, Confluence.
- Other: Qt, PostgreSQL, Figma, Visily, Arduino, Electronics.

Interests and Achievements

- Won first place in UL Student Entrepreneur of the Year.
- Awarded the Patch San Francisco Fellowship.
- My IEEE Robotics Team won the IEEE International Robotics Championship in Malta.
- Elected as a UL Consulting and Entrepreneurship Society committee member.
- My team won first place in the 2023 NDRC Start-up Sprint.
- Pitched to judges at HackIreland 2025.