

- Second-year student pursuing a BSc/MSc in Immersive Software Engineering (ISE) at University of Limerick. Currently averaging **QCA 3.96/4.0**.
- Chosen by Y Combinator as one of the top 2,500 AI-focused students worldwide to attend its first-ever AI Startup School. Awarded an Emergent Ventures grant to fund the trip.
- 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, Analog Devices, and AWS.

## Education

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### 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.

**Chesspionage:**      Designed, assembled, and programmed a smart chessboard with 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: Web3 ticketing app, secure file sharing platform, bird classification CNN, sports club management web-app, heart disease prediction model, pizzeria game, taxi simulator, C++ Qt-based adventure game, JavaFX quiz game, and AWS cloud project.

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### 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

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### **Amazon Web Services (AWS) - Software Engineering Intern**

June 2025 – Current

Developing a tool that pulls ticket data, on-call logs, and dashboard metrics from Amazon's internal MCP servers, then feeds the results to AWS Bedrock to generate an operations report.

## **Analog Devices International - Software Engineering Intern**

September 2024 – December 2024

Redesigned the SmartMesh IP GUI applications. Created a live mesh topology explorer webpage with features such as mote search and information panels. Contributed to an embedded monocular depth estimation research project. Trained a neural network to run on the MAX78000 CNN accelerator and 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. 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. <https://ulces.ie>

## **Personal Projects**

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### **Compact**

Developed a chrome extension tool for contract analysis, allowing users to summarize selected contracts, 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**

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- 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.

## **Achievements**

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- Won first place in UL Student Entrepreneur of the Year.
- Awarded the Patch San Francisco Fellowship.
- Awarded an Emergent Ventures grant (Mercatus Center).
- Selected for the YC AI Startup School.
- 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.