

# SAM O'CONNELL

Mechanical & Manufacturing Engineering with Management · Trinity College Dublin

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Engineering student who builds and ships — a booking system delivered on internship, a live platform for small businesses, an award-winning AI browser extension, and mechatronics hardware taken from CAD to working prototype. First-class honours alongside a 625-point Leaving Certificate, and comfortable working across software, hardware and the people side of a project.

## EXPERIENCE & LEADERSHIP

**Software Engineering Intern** — Trinity College Dublin Summer 2026  
E3 Learning Foundry · Room-booking system

- Built a **room-booking system** for the E3 building through successive prototypes, covering booking capture, live room availability and an admin view for managing usage across modules.
- Designed the bookings data layer and automated the admin reporting workbook, replacing manual slot tracking with a live-refreshing view of room status.

**Chief Volunteer Coordinator** — SHARE, Cork Sep 2022 – Sep 2023

- Led and scheduled **hundreds of student volunteers** across weekly outreach visits and stakeholder engagement.
- Planned and ran the charity's annual Christmas collection — a **six-figure fundraising campaign** — owning rostering, street coverage and day-to-day operations.

**Soccer Coach** — Coerver Coaching Munster 2022 – 2025

- Delivered structured sessions across seasonal camps and the Coerver Performance Academy, building communication and leadership under pressure.

**Dining Room Server** — Trinity College Dublin Sep 2024 – present

- Balance part-time work in a fast-paced professional environment alongside full-time studies and first-team soccer.

## SELECTED PROJECTS

**SlotSpace** — Founder & Engineer 2025 – present  
React · Supabase · Full-stack web platform

- Designed and built a booking-management platform that lets small businesses take and manage appointments without the admin overhead of enterprise tools.
- Currently **onboarding the first founding-member pilot businesses** across Dublin and Cork; own the product, engineering and customer discovery end to end.

**SpoilerShield** — Chrome Extension 2026  
3rd place — UCC ACM World Cup Hackathon · On-device AI (Gemini Nano)

- Built a browser extension that detects and blurs text and images about any chosen show, film or team before the user sees them.
- Runs entirely **on-device using Chrome's built-in Gemini Nano** — no browsing data ever leaves the machine. Built with a team in a weekend and still in active development.

**Guardian** — Mechatronics Team Project 2025  
Arduino UNO · SIM808 GPS/GSM · Accelerometer · CAD enclosure

- Designed, prototyped and pitched a wearable location-tracking safety device in **six weeks**, integrating impact detection with automatic GPS alerting over GSM.

**Trinity Hall Welfare** — Founder & Builder 2025 – 26  
Web platform · Built alongside serving on the Trinity Hall welfare team

- Built and launched the wellbeing platform now **serving over 1,000 first-year students**, turning scattered support information into one place people actually use.

## EDUCATION

**Trinity College Dublin**  
M.A.I. Mechanical & Manufacturing Engineering with Management  
2024 – 2029  
**Grade: 1.1 — 81%**  
1st team, Trinity Soccer

**Harvard Business School Online**  
CRe — Certificate of Readiness  
Jun – Sep 2025  
**Pass with High Honors**  
Business Analytics, Economics for Managers & Financial Accounting

**Presentation Brothers College**  
Leaving Certificate, Cork  
2018 – 2024  
**625 points — maximum**  
7 H1s at Higher Level (99th percentile)

## AWARDS

- Naughton Scholarship** (2024) — awarded to innovative, high-achieving STEM students
- Trinity Entrance Exhibition Award** (2024) — highest Leaving Certificate points from my school
- 1st place**, IAMTA Cork Applied Maths Competition (2024)
- 3rd place**, UCC ACM World Cup Hackathon
- Best Picture**, First Cut! Youth Film Festival (2022) — lead role, *Vindicta*

## SKILLS

**ENGINEERING**  
SolidWorks, MATLAB, Arduino & electronics prototyping, CAD for manufacture

**SOFTWARE**  
Python, JavaScript/React, Supabase, Git, Chrome extensions

**AI**  
Agentic AI workflows, LLM tooling, prompt & cost engineering

**BUSINESS**  
Excel, business analytics, financial accounting, economics

## INTERESTS

Competitive soccer — academy football with Cork City, Cobh Ramblers and College Corinthians; won the **SFAI U16 All-Ireland Cup** with Cork Schoolboys. Film and acting. Building and tinkering with hardware.