

## Education

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Maynooth, Co. Kildare

Maynooth University

2017 – 2022

- B.Sc. (Hons) in Computer Science & Software Engineering
- Thesis: *Trajectory Following Game Phone App* – motion-based gameplay using real-time sensor input

## Technical Skills

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- Languages: Python, PHP, Javascript / HTML / CSS, SQL, Java, C#
- Frameworks and Libraries: Django, Jest, HTMX, Leaflet / Geoblaze / Georaster, Dygraph, React + Vite (learning), Tailwind (learning), Jupyter Notebooks
- Tools: GitHub / GH Actions, WSL2, Conda, Docker, VS Code / Cursor / Eclipse, DBeaver / pgAdmin, Photoshop

## Work Experience

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Junior Energy Analysis  
Software Developer

Mainstream Renewable  
Power

August 2022 – April 2025

- Developed and maintained a full-stack Django web application for monitoring and analysing live sensor data
- Designed and implemented multiple Python-based backend systems for efficient time-series data analysis and processing
- Led a complete front-end overhaul of the application, modernising the interface and improving user experience
- Functioned as the lead developer during a key transition phase, contributing to technical interviews and handover process to an external team, focusing on the Python backend
- Independently managed full project life cycles in a lean team environment, working daily with Python, SQL, and JavaScript

Software Engineer Intern

Wandsoft

April 2021 – August 2022

- Contributed to back-end development using ColdFusion, HTML and SQL, enhancing the GDPR compliance and CRM applications
- Supported system migration by testing functionality on new desktop environments

Assistant of an IT  
Technician

Tech Force

January 2015 – April 2015

- Learned to diagnose and repair a range of hardware and software problems

## Projects

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- **Rogue Seas** (rogueseas.net) A cross-platform online text based role-playing game using Django and Ionic Capacitor. It features intelligent auto-battles, player-vs-player mechanics, level progression, chat and mail system. Django, Python, HTML / CSS / JS, SQL / Postgres
- **Instrumenter** A real-time pitch detection tool for tuning instruments using Python, built as a windows application. Python, SciPy, NumPy, sounddevice
- **Travelling Salesman for Drone Delivery** Simulated optimal delivery route for drones using Monte Carlo simulation in Java. Project grade of 4.5 / 6. Java