

Colm Murphy

✉ colmmurphy016@gmail.com ☎ 0874662166 📍 Ballyphehane, Cork in colmmurphyxyz

🌐 colmmurphyxyz 🖱 www.colmmurphy.xyz

Education

BSc Computer Science, *University College Cork*

September 2021 –
May 2025

- **Year 2: First-Class Honors:** Intermediate Programming, Algorithms & Data Structures, Computer Architecture, Operating Systems, Information Storage & Management
- **Year 1: First-Class Honors** - Including **91%** in Introduction to Python Programming, **90%** in Foundations of Computer Science 1/2, and **95%** in Introduction to Calculus

Languages: Python, Java, Kotlin, Go, Javascript, Typescript

Applications: VSCode, IntelliJ Idea, MySQL, Git/GitHub, Godot

Leaving Certificate, *Coláiste Ghobnatan*

September 2015 –
June 2021

Received a medal of recognition of academic excellence from the Cork Education & Training Board for achieving **613** points out of 625 in the Leaving Certificate, including a **H1** in **Maths**, Irish, ,Design & Communication Graphics, **Chemistry** and **Physics**

Ballymakeera, Co. Cork

Projects

Software Development - ELO rating system, *Kotlin*

- Designed and implemented a software to rank a group of chess players using the ELO rating system
- Incorporated MongoDB to keep a record of games played, allowing for ELO changes to be reverted if necessary

Web Development - *netsoc.co*, *React*, *TypeScript*

- built a new website for UCC Netsoc using React and Typescript
- Collaborated with other developers to produce a website for 700 society members

Embedded Development, *C*

- Developed a bicycle speedometer using a Raspberry Pi Pico microcontroller and RP2040 microprocessor

Web Development, *React*, *TypeScript*, *Docker*

- Built a responsive personal portfolio website using ReactJS
- Containerised the webserver using Docker and Deployed the container to a DigitalOcean instance

Professional Experience

Intern, *University College Cork*

July 2023 –
September 2023
Cork, Co. Cork

- During this internship, I worked to implement a quantum-resistant cryptosystem in hardware using the Verilog hardware description language and the Xilinx Vivado software
- Studied and applied the underlying mathematical concepts used in pre and post-quantum cryptography methods
- Optimised the energy usage of the hardware implementation

- Analysed the performance and power consumption of the hardware

SysAdmin, *UCC Netsoc*

December 2021 – present
Cork, Co. Cork

- Worked with a team of System Administrators to maintain existing software, including netsoc.cloud, a cloud hosting service for UCC students, as well as develop new software for the society
- Utilised an Ansible codebase to maintain the society's existing software and hardware infrastructure, and to deploy new software to our 4 servers
- Successfully migrated Student Media web infrastructure from old University hardware to a docker container on a virtual machine on one of the society's servers with minimal downtime, with the aid of our Ansible codebase

Server/Bartender, *Isaacs Restaurant*

May 2022 – present
MacCurtain Street, Cork

- Worked as a server in a busy fine dining restaurant in the city centre
- Served high quality food and wine to up to 150 guests in a 4 hour period
- Greeted guests, took food & drink orders
- Listened to guests and provided food & drink recommendations to accommodate personal preferences and dietary restrictions
- Resolved conflicts and handled guest complaints in a professional manner
- Took bookings, deposits and answered guest queries over the phone
- Closed up the restaurant at the end of the night, including doing till readings and locating the source of any shortages

References

Available on request