William Oldham

Software and Computer Engineer

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🔗 View my digital CV including a complete list of technologies and work experience

EXPERIENCE

Senior Software Developer and IT Manager
North Lincs Bio Fuels

📅 December 2022 – January 2025   📍 Lincoln

Responsibilities:
- Manage the company's IT infrastructure, including cloud infrastructure, hosted SaaS products, Microsoft 365 and end-user devices.
- Senior developer of multiple pieces of bespoke software produced from scratch.
- Installation and support of wired networking and VPN solutions for clients.

IT Manager
St Peter St Paul's Catholic Voluntary Academy

📅 November 2019 – March 2023   📍 Lincoln

Responsibilities:
- Planned and oversaw multiple IT projects in printing, IP telephony and wired and wireless infrastructure modernisation.
- Managing all parts of the academy's ICT infrastructure, including networking, printing, telephony, end-user devices (Desktop and Mobile), servers and website.
- The point of contact for Students, Parents, Teachers and Staff for all ICT-related issues.
- Independently create and review ICT procedures to improve the ICT service to staff and students.

Society President
British Sign Language Society

📅 July 2020 – June 2021   📍 University of Lincoln

Level 2 Support Agent & Staff Mentor
Shockbyte

📅 Aug 2017 – Aug 2018   📍 Remote

VOLUNTEERING

Crisis Text Line Volunteer
Shout UK

📅 November 2022 – Present   📍 Remote

💬 "Enhancement Week" Guest Speaker
University of Lincoln

📅 November & December 2020   📍 Lincoln

SUMMARY

I am a versatile problem-solver with expertise in software development, system administration, and DevOps. I have a strong passion for user-oriented solutions and I take pride in my continuous learning which has shaped me into a polyglot programmer and experienced administrator of networks and computing infrastructure, spanning on-site, hybrid, and cloud environments.

STRENGTHS

Problem Solving   Project Management

Self-Motivator   Fast Learner

Full-Stack Development   Android / iOS

Windows / Mac / Linux   System Administration

Network Administration   Kubernetes

EDUCATION

BSc Computer Science
University of Lincoln

📅 2019 – 2022

Grade: First class honours (Average: 82%)
Modules include: Network Fundamentals (88%), Cloud Computing (74%), Team Software Engineering (75%) and Cyber Security (90%).
Dissertation project: Awarded a first (81%) in the topic of automated configuration management.

Level 3 Qualifications
St Peter St Pauls Catholic Academy

📅 2017 – 2019

Achieved a set of results both at A-Level and Level 3 BTEC {A*, D*, A, B} which equated to 200 UCAS points. Because of this set of grades, I went on to achieve the "Excellence Scholarship" from the University of Lincoln.

REFERENCES

References are available on request.

PROJECTS

University 3rd Year Dissertation Project - Themis
University of Lincoln

📅 October 2021 – May 2022   📍 Click to view GitHub Project

For my final year, I went through the process of designing, implementing and testing a piece of automation software which I named Themis. At the beginning of the project, I set an ambitious goal of producing a full-stack application, including a client application and a completely bespoke communication protocol. I was able to meet this goal of producing a fully featured application described as "[a] project and report [which] would not be out of place at a top IT consultancy" by a marker and awarded 82% (First).

Technologies used include:
- Vue.JS and Nuxt - Front-end framework and SSR.
- GoLang - Back-end / Client-side programming language.
- Docker - Container application to produce portable applications.
- PostgreSQL and Flyway - Relational database and migration tool.
- Node.JS and Express - JavaScript runtime and web back-end framework.

Cascade Discord Bot
Open-Source Project

📅 September 2018 – July 2024   📍 Click to view GitHub Project

For the past four years, I have worked on an open-source project called Cascade Bot, which is a Discord bot designed around customisability. Throughout this project, I have developed experience with a wide range of technologies and practices by designing and setting up a highly scalable bespoke infrastructure.

Technologies used include:
- Java and Kotlin - Back-end programming languages.
- Vue.JS and Nuxt - Front-end framework and SSR.
- PostgreSQL and Flyway - Relational database and migration tool.
- Docker - Container application to produce portable applications.
- RabbitMQ - A message broker to enable real-time communication between services.

Image Processing Project
University of Lincoln

📅 December 2021 – February 2022   📍 Source available on request

During my image processing module, I produced Matlab code for processing medical images and attempting to identify red blood cells and bacteria. I was awarded 88% for this project, with my solution being described as "innovative" by markers.

Parallel Programming Project
University of Lincoln

📅 March 2022 - April 2022   📍 Source available on request

Throughout this project, I learned how to utilise GPUs to process tasks on a massively parallel scale. My final project was very highly scored at 91%, describing it as "an excellent submission" with code that was "readable, organised clearly, and efficient".

CERTIFICATIONS

Cisco CCNA
University of Lincoln

📅 October 2020 – April 2023

🔗 **April 2023** - CCNA Certified
🔗 **October 2022** - Enterprise Networking, Security, and Automation
🔗 **August 2022** - Switching, Routing, and Wireless Essentials
🔗 **February 2021** - Introduction to Networks

MTC AZ-900: Azure Fundamentals
University of Lincoln

📅 December 2020

Credential ID: `JmdQ-4TVv`

MTA: Networking Fundamentals
University of Lincoln

📅 February 2021

Credential ID: `wMRwq-HaMS`

The Lincoln Award
University of Lincoln

📅 February 2021

Credential Link

MTC SC-900: Security, Compliance, and Identity Fundamentals
University of Lincoln

📅 October 2021

Credential ID: `waCeo-Fa87`

MTA: Windows Server Administration Fundamentals
University of Lincoln

📅 November 2021

Credential ID: `F8WA-XLR9`

MTA: Introduction to Programming Using Java
University of Lincoln

📅 December 2021

Credential ID: `ynpr-uTBw`

MTA: Windows Operating System Fundamentals
University of Lincoln

📅 February 2022

Credential ID: `yHDL-DTPb`