

Ethan Hulme

Aspiring Technologist: AI, Robotics, Secure Systems, Data Analysis

Darwen, Lancashire | 07715 232502 | hummm3ll@outlook.com | LinkedIn - ethan-hulme

Profile

BSc Computer Science student with a strong foundation in algorithms, programming, systems, and applied AI. Passionate about building secure and intelligent systems that bridge robotics, machine learning, and cybersecurity. Adept at analytical problem-solving, systems-level design, and research-driven innovation.

Technical Skills

Programming & Data Analysis: Python (NumPy, Pandas), C++, Java, SQL, JavaScript

AI & Machine Learning: TensorFlow, PyTorch, Computer Vision, ML Algorithms

Cybersecurity: Network Security, Secure Coding, System Hardening, Vulnerability Testing

Robotics & Embedded Systems: Microcontrollers, Real-Time Systems, Sensor Fusion, Flight Control Concepts

Tools & Platforms: Git/GitHub, Linux (Arch, Ubuntu), Docker, VS Code, Wireshark, Vim, Eclipse IDE

Projects & Research

AI & Secure Systems (Ongoing)

- Exploring adversarial attacks on ML models and planning on building robust defence mechanisms.
- Researching AI-driven cybersecurity threat detection and response automation.
Focus: AI Security, Adversarial ML, Secure Automation

Robotics & Embedded Security (Academic Focus and Hobby)

- Studying sensor spoofing, fault tolerance, data integrity and secure communication in autonomous systems.
- Investigating Python scripts and safety-critical coding in C++ for embedded robotics and avionics.
Focus: Robotics, Embedded Systems, Control Security

Personal Portfolio Website (Deployed)

- Built and secured a personal site with proper deployment and lifecycle management.
- Implemented security-conscious version control and continuous integration.
Focus: Secure Web Development, Project Presentation

Experience

Administrative Assistant - E-Zee Cleaning Co. Ltd, Bolton

Sept 2022 - Jan 2023

- Maintained and analysed internal databases, ensuring data integrity and controlled access.
- Streamlined workflows by applying analytical insights to operational processes.

Education

BSc Computer Science - Edge Hill University

Oct 2024 - May 2027 (Expected)

Relevant Modules: Database Systems, Computer Systems Architecture & Networks, Differential Calculus, Programming, Object Oriented Programming, Robotics & Artificial Intelligence

Scholarship: High Achievers Scholarship

Certifications

- Cisco - Introduction to Packet Tracer
- Cisco - Introduction to Cybersecurity
- Cisco - Cyber Threat Management

Technical Interests

| Secure Software & Cryptography | Adversarial AI | Robotics & Autonomy |
| Algorithmic Trading | Aeronautics & Control Systems |