

## Personal statement

A high-achieving and driven computing and technology professional, demonstrated through a year of experience working as a Project Engineer and a Python AI developer, with a 1st class honours computer science degree from Edge Hill University. Seeking opportunities to create innovative systems, particularly in software engineering, data analysis, artificial intelligence, and other emerging technologies, to grow technically and professionally.

Demonstrated a strong ability to work effectively within specialist AI and engineering teams across multiple organisations, reporting to technical leads while remaining highly self-sufficient. Experienced in applying a wide range of emerging technologies to deliver practical, production-ready solutions in fast-paced commercial environments. Contributed to both collaborative and self-initiated projects concurrently, with a proven ability to rapidly research, prototype, and implement solutions that solve real business problems and improve existing processes in response to evolving requirements.

## Technical Skills

- Programming: Proficient in Python; using libraries such as PyTorch, OpenCV, SAM2, DINO, Flask, YOLO, Transformers etc.
- Working knowledge of Java, C#, HTML/CSS, and GDScript.
- Engine Development: Created games using Unity (C#) and Godot (GDScript), with a published game to the Google Play Store. These topics were self-taught during free time. I then used these skills to create a training simulator in VR, and an AI part identification app.
- Operating Systems: Proficient in Windows, Linux, and Android.
- Data Analysis: Knowledge of SQL Databases and experience with data analysis tools such as SPSS.
- DevOps & Tools: Proficient with Docker, Git, and Azure DevOps.
- Web Development: Intermediate level knowledge of NextJS, Tailwind, and TypeScript / JavaScript.

## Employment History

### AI Developer

### TVS Supply Chain Solutions

June 2024 – June 2025

Developing AI-driven solutions to enhance logistics and transport operations. Responsibilities include designing and implementing AI models, computer vision systems, and developing automation tools to enhance operational efficiency.

### Projects:

- Computer Vision Damage Detection: Created a system that detects the ways in which a smart meter is damaged using a multi-camera imaging box to capture images and train an AI model. The model generates real-time predictions returned to the warehouse system using an API.
- AR4 Robotic Arm: Collaborated with others on the integration of a robotic arm for precise manipulation tasks utilising AI-driven part identification and ROS2.
- Part Identification App: Developed an Android app in Godot connected to a custom API that transmits image data to a vision model that labels images with a part identification number. The prediction and confidence are then sent back to the user's device.
- LLM Enhancement: Upgraded the capabilities of the in-house LLM chatbot by ingesting SQL schemas into the Retrieval-Augmented Generation (RAG) system.

## **Project Engineer**

## **Virtual Engineering Centre (VEC)**

**October 2025 – Present**

Contributing to projects involving 3D environments and website development alongside a multidisciplinary team to solve industry challenges for small-medium sized enterprises (SMEs) and implementing bespoke solutions that improve technical design and process efficiency.

### **Projects:**

- Finance Website: Focused on redesigning the front-end of a finance website designed to help small businesses improve their finances and their knowledge around the topic, producing various pages as part of a three-person team.

## **Education**

### **Edge Hill University (Degree)** *(2021 – 2024)*

BSc (Hons) Computer Science – First Class Honours (1:1)

### **Rainhill Sixth Form Centre (A-Levels)** *(2019 – 2021)*

Computer Science – A, Physics – B, Maths – C

## **Other Achievements, Qualifications, and Affiliations**

- Edge Hill University Academic Achievement Award – Highest average mark in the computer science department
- Microsoft Certified: Security, Compliance, and Identity Fundamentals
- Former member of the cybersecurity and research club at Edge Hill University
- Former member of the RAF Cadets

Please also checkout my website: [www.harryellis.dev](http://www.harryellis.dev)