Education The University of Sheffield

BEng Electronic Engineering

2017 - Present

UK

Expected: First Class

Professional Experience

VolkerRail Ltd.

Electrical Design Engineering Intern (Placement Year)

June – June 2020

Doncaster, UK

- Designed and developed electrical design schematics and simulations in a team for use on the railway
- Managed the entirety of a design job; understanding the scope, rectifying issues in electrical simulations, improving design workflow with efficient team communications

CBC Emea August 2016

Web Development Intern

• Learned to design and code websites in an agile environment

Project Experience

Final Year Project

Sept. 2020 - Present

University of Sheffield, EEE Department

- Development of algorithms to embed and extract invisible watermarks from digital and print media for copyright protection
- Improved technical knowledge on computer vision and image signal processing
- Writing an IEEE Article on the findings and performance of the algorithm
- Development of a Web Application for user access to the software
- Making use of Python, OpenCV, NumPy, PyWavelets and Git

IMechE Formula Student

2017 - Present

University of Sheffield, Sheffield Formula Racing (SFR)

- Member of a new initiative, the Electric Powertrain team to design and develop an electric formula student car in conjunction with the IC car
- Improved technical knowledge of mechanical designs in tandem with electronics and software Developing CAN comms. and data logger using micro-controllers.
- Developed better communication and teamwork skills in the inter-disciplinary team of 60 members

Raspberry Pi Server

May – November 2020

Personal Project - <u>vomis.blog/piserver</u>

- Designed and 3D printed a home server for local backups and network apps
- Using Fusion 360 (CAD), Python, React, HTML, CSS, Docker and JavaScript

Extra-Curricular Activities

Server Build Maintenance - <u>yomis.blog/server-pc</u>

- Built a Server PC running Linux as a hypervisor with Kernel-based Virtual Machine (KVM) to virtualise other operating systems
- Learned more about the Linux kernel, kernel patching, resource sharing & management, network protocols, scripting and Docker containers

Photography Society Publicity Officer

- Improved member engagement through the effective use of social media platforms
- Developed illustration and animation design skills to promote events

Photography Website – <u>yomitosh.com</u> built with Next.js static site generator iOS App Development – Developed an published an iOS app to the App Store

Skills

Languages: C/C++, Swift, Python, MATLAB, JavaScript

Frameworks: React, Next.js

Development Tools: Git, Xcode, VSCode, Linux, Docker

Other: Photoshop, Blender, Arduino IDE, SQL