

## Personal profile

Embedded Firmware Engineer with expertise in embedded systems, PCB design, and IoT solutions. Experienced in developing internal and customer-facing websites and integrating them with IoT platforms. Skilled in AWS cloud deployment, debugging embedded/IoT hardware, and delivering robust solutions under strict deadlines. Passionate about innovation, continuous learning, and applying problem-solving skills to achieve results in collaborative engineering environments. Outside of work, I apply my technical creativity through 3D printing and personal projects.

## Technical Skills

Hardware & Embedded Systems			Software & Development			Other	
Altium	LTSpice	STM32	I2C, SPI,	Go, C, Python,	Git, WSL2,	Confluence	Fusion 360
eCADSTAR	Arduino	ESP32	UART,	SQLite, Alpine.js,	Docker	Jira	Cura
KiCad		RPi	CAN	TailwindCSS,	Yocto	MS Office	3D printing

## Experience

Pilot Group Net-Zero – Embedded Firmware Engineer	Oct 2024 – Present
<ul style="list-style-type: none"><li>• Debugging and maintaining legacy code for embedded and IOT hardware.</li><li>• Created a bespoke Linux image for a Raspberry Pi CM5 gateway using the Yocto project.</li><li>• Developed C applications for the STM32G474 using STM32CubeIDE.</li><li>• Reviewing and creating new schematics, PCB layouts and BOMs using Altium.</li><li>• Deployed, configured, and managed AWS EC2 instances for development and for testing environments.</li><li>• Creating and maintaining documentation on confluence.</li></ul>	
Nexperia LTD – Equipment Development Engineer	Sept 2021 – Sept 2024
<ul style="list-style-type: none"><li>• Expanded Nexperia’s testing capabilities by designing and developing IOL and HCDP test equipment to characterize next-generation MOSFETs, encompassing PCB design, firmware/software development, and LabVIEW.</li><li>• Recognized with the Star Award for delivering a full-stack web application and cited as a “key reason” for meeting critical project milestones.</li><li>• Automated Nexperia’s device testing by developing a Go-based web portal that integrated directly with test equipment, enabling users to submit test requests and access results through a streamlined interface.</li><li>• Provided team training and technical support in Altium and eCADSTAR.</li><li>• Volunteered to design and build a soapbox racer for charity, securing 8th place out of 42 teams.</li></ul>	
Intel UK – Technical Marketing Engineer	July 2019 – Aug 2020
<ul style="list-style-type: none"><li>• Delivered technical support across Europe, the Middle East, and Asia, and aided in the adoption of next-generation IoT, Client, and HPC Server platforms.</li><li>• Supported product launches, field testing, and introduction of new applications.</li><li>• Debugged and resolved issues on prototype next-generation platforms, including Embedded, IoT, Client, Server. Most notably the DCPMM devices.</li><li>• Designed and implemented an IoT smart mirror demo showcasing Intel OpenVINO facial recognition technology.</li></ul>	

## Education – University of Huddersfield

Sept 2017 – July 2021

Grade:	(1:1) BEng (Hons) Electrical and Electronics Engineering
Final Year Project:	Deep Learning, Computer Vision for Autonomous Vehicles (AI, CNN)