

WORK EXPERIENCE

INDEPENDENT OPEN-SOURCE WORK OPEN-SOURCE DEVELOPER (DURING NON-COMPETE)

December 2023 – Present | Remote / Worldwide

- Launched and maintained several open-source projects:
 - **PairPods** – Native macOS app for sharing audio between two Bluetooth devices.
 - **CoolTaxTool** – Web-based UK tax calculator and visualiser.
 - **TastyTrade Analytics Dashboard** – Browser-based privacy-focused trading analysis tool.
 - **Synology Dashboard** – Comprehensive Grafana stack for NAS performance monitoring.

JUMP TRADING HARDWARE ENGINEER

April 2021 – November 2023 | Bristol, UK

- Ran a hardware lab focusing on performance, reliability and latency testing of ASIC and FPGA based systems.
- Led system design and development of custom low-latency trading platforms.
- Closely collaborated with various teams to understand platform's high-level requirements.
- Managed full custom hardware development lifecycle, including initial concept, schematic capture, PCB layout, chassis and thermal design, and planning for manufacturing and deployment.

QUALCOMM IC VALIDATION ENGINEER

August 2018 – April 2021 | Cambridge, UK

- Conducted comprehensive IC validation at block- and system-levels.
- Developed a suite of widely used automation tools for test execution, equipment control, data storage, and data analysis.
- Provided innovative solutions that reduced testing time by over 15x while also increasing test coverage by 20x.

INTEL PLATFORM APPLICATION ENGINEERING INTERN

July 2016 – August 2017 | Swindon, UK

- Provided various global OEM customers with technical support and troubleshooting around Intel-based server platforms.
- Delivered impactful product presentations at major industry events, e.g. Intel HPC Demo at HPE Discover London 2016.
- Directly supported Prof. S.W. Hawking, enhancing his communication equipment's reliability and performance.

EDUCATION

UNIVERSITY OF HUDDERSFIELD BENG ELECTRONIC ENGINEERING AND COMPUTER SYSTEMS

2013 – 2018 | Huddersfield, UK

First Class Honours Degree | Average mark over 90%

Undergraduate Project: Software Emulation of a Hardware Voice Synthesiser – Reverse engineered the voice synthesiser used by Prof. S.W. Hawking and helped creating a hardware-level emulator, which he's used as a primary communication tool for the last two months of his life.

SKILLS

Hardware Design & Testing

- ASIC characterization and validation
- System design for custom high-speed, low-latency platforms based on ASIC and FPGA (10GbE, PCIe)
- Comprehensive hardware testing, including latency and stress testing, and performance optimization
- Schematic capture (Altium Designer, OrCAD)
- PCB Design (Altium Designer)
- 3D mock-up design and printing (SolidWorks)

Scripting & Software Development

- Advanced Python, basic JavaScript, C/C++, TCL, Swift
- Proficient with scripting and automation of various tasks including equipment control, hardware testing, and infrastructure maintenance

Test Equipment & Lab Management

- Skilled in the application of high-speed oscilloscopes and protocol analysers (PCIe, Ethernet) for system testing and validation.
- Experienced in running a hardware lab and deploying server infrastructure