





Electronic Engineer

PROJECTS

CUBE

A handheld device comprising of 6 OLED screens for each face on a cube. This project required design of circuits for battery management and voltage regulation, 3D modelling of the frame, as well as efficient C code to run 6 screens and a 6 DOF sensor off an ESP32.



Orthodox

A unique ortholinear keyboard, This project required custom designed keycaps to simplify the keyboards aesthetic, as well as hall effect sensors for certain keys to allow for analog keypresses, a custom driver had to be written to allow for seamless integration of the keyboard with computers

KiCAD / FreeCAD / OpenSCAD / Git



EXPERIENCE

RF Test Engineer Curvalux 2021-2022

- Developed driver for communicating with Keysight devices using pyVISA.
- Developed low level driver for a Beamformer IC.
- Developed a driver for controlling a heavy duty azimuth and elevation rotator.
- Automated radiation pattern measurements of antennas by combining my developed drivers.
- Learned how to professionally collaborate and document git repositories.

Research & Development Engineer

Huawei 2019-2020

В

- Developed a python library to communicate with a TEC controller over the serial protocol.
- Developed a standalone program to produce failure analysis reports, saving countless engineering hours.
- Presented weekly meetings to inform senior engineers of device failures and reliability.
- Analysing reliability of devices with PAM4 / NRZ inspection, shear testing, electroluminescence inspection.

Hardware Engineer Avalon 2018-2019

- Tasked with designing and soldering the power management PCB.
- Had to regularly liaise with engineers from different disciplines to check compatibility.
- Manage my time effectively to balance my University work with Avalon work.

Design Project

DEFEDENCES

Global Engineering Challenge 2018-2019

- Tasked with designing mobile retina scanners to diagnose diseases in Kibera.
- Designed a program capable of recognising diseases based on symptoms in people's retina.
- Developed library to communicate with signal analysers to automate testing.
- Pitched the idea in front of a crowd of 30+ people, receiving questions for 10 minutes.

REFERENCES	EDUCATION

Jason Hanson jason.hansonu +44 (0)7799 03	Princial RF Engineer @curvalux.co.uk 36 362	Bachelor of Engineering Electronic Engineering:	University of Sheffield 1st	2017-2021
Xiaoli Chu x.chu@sheffiel +44 (O)1142 259		A-Levels Mathematics Physics Computing	Dunraven B B B	2015-2017
Lu Zhang luzhang1@hua +44 (0)7881 25		GCSEs (11 Qualifications Passed) Mathematics Science	Harris Academy A A	2010-2015

English