

Front End

Deep JS understanding (ES6)

Jest, React Testing Library

React

HTML5

CSS

SVG

Webpack

Back End

Very strong network fundamentals

Websockets (C, C++, Python, JS)

Node & NPM

Flask

Redis

Mongo

Devops

Linux admin: Debian, Ubuntu, RHEL

Tools design & development

Python scripting

Shell scripting

Network administration

Systems Programming

Embedded systems development

Testbench development

Linux kernel hacking

Make & Makefiles

VI, VIM, TMUX

sed 8 awk

C & C++

Bootloaders

Chip Bringup

Engineering Skills

Exceptional Git knowledge

Refactoring and stack unrotting

Profiling & code optimisation

Expert bug hunter

Test-driven development

Inter-team co-ordination

Onboarding & mentoring

API design

Agile

Generative Design

Excellent algorithm design skills

Three.js

Openframeworks

Kinect

Shaders

Cassandra May

Full Stack Developer, Bare Metal to DOM

Firmware Engineer II, DSL R&D Broadcom Limited 2015 - 2020

- Network bringup of BCM65400 & BCM65450 SoCs
- Ownership and redesign of several major project areas
- · Liaising with silicon and modem design teams
- Lead role in bringup process adaptation following reorganisation
- Development of internal tools for hardware teams
- Development of test and reference driver code
- Instrumental in identifying multiple showstopper bugs prior to tape-out

R&D Engineer Leo Dearden Enterprises 2014-2015

- Collaboration on pre-startup phase of a new 3D printing technology
- Responsible for overcoming several key roadblocks
- Rapid prototyping CAD & CAM, 3D printing, resin casting, machining
- Whole-system functional testing

M.Sc. Computing Science (Distinction) Imperial College London 2013-2014

- Studies focused on robotics, networkinging, and systems programming
- As part of a group, developed an autonomous drone control system using commodity hardware
- Developed a homogenous distributed intrusion detection system for wireless sensor networks

B.Sc. Archaeology (First Class Honours) UCL 2004-2007

- Specialised in archaeozoology, survey methods, and the development of electronic learning aids
- Selected for fieldwork placements at prestigious sites in Greece, Turkey, and the UK
- Assisted with research on taxonomical classification of the Çatalhöyük and Tell Taya collections

Hobbies & Projects

- Light art (see pyzzazz & pyzzazz-www on my github)
- Vintage synthesizer repair & restoration
- Playing guitar, bass, keyboard
- Generative art & creative programming