



Electronic Design Engineer

Duku are a vibrant, well-established product design consultancy located in Cheltenham, Gloucestershire who specialise in the design and development of EV charging infrastructure.

We are offering an excellent opportunity for an experienced Electronic Design Engineer to join our team to assist in the design and development of innovative electric vehicle charging equipment for public sector, commercial and domestic clients across the UK.

We are working on a range of exciting projects that require a multidisciplinary design team to work collaboratively on all aspects of product development including:

- Design specification and sourcing
- Mechanical design engineering
- Electrical and electronic engineering
- Software development
- CAD development, prototyping & design for manufacture
- Product testing & certification

This is an exciting time to join a growing design consultancy with a specialist EV team working on products in a high growth industry and play a direct role in the design and execution of a range of innovative EV charging solutions. In addition, the role provides an excellent opportunity to work on a broad range of other projects including consumer products, mobility, health and fitness and medical devices.

Skills & Responsibilities

- Develop electronic solutions and PCBA's for EV chargers and other consumer products including electromechanical, mains 230V.
- Electronic specification development.
- Involvement in system-level design and collaboration with electronics engineers in specifying and selecting appropriate microcontroller / processors to meet product requirements.
- Hardware and Firmware development and optimisation of electronic systems for low volume and large-scale production.
- Embedded systems, electronics and software.
- Circuit design, comms, analog & digital I/O, power supply, control & logic, PLC.
- Prototyping (including proof of concept), testing and validation and debugging of electronic solutions.
- Research and feasibility reports to advise on suitable solutions at an early stage of project work.

- Deliver cost effective and production ready electronic systems and circuit board design.
- Create clear schematics and generate efficient PCB designs often constrained by tight spacing.
- Day to day project management and reporting of progress for ongoing work.
- Generate PCB manufacturing information, such as gerbers, BOM, assembly drawings and pick and place files.

Requirements

- Degree in Electronics Engineering, Computer Science or related field
- Track record of developing electronic design solutions to production.
- Experience of PCB/PCBA design for a range of products.
- Experience with microcontrollers development tools, compilers and debuggers.
- Superb analogue and digital hardware design skills accrued from a broad portfolio of commercial projects.
- Experience in board debugging, fault finding and testing.
- Excellent computer and literacy skills.
- Experience managing projects from inception to completion.
- Strong communication, planning, and task management skills.
- Self-led with the ability to research and propose solutions to problems.

Desirable

- Experience in developing embedded software for commercial consumer electronics products.
- Bare metal & RTOS microcontroller software development in C on resource-constrained devices (8-bit / 16-bit / 32-bit microcontrollers).
- Experience with Embedded C/C++ and/or Python
- Experience of working across multiple Operating systems (eg Linux, Android, embedded OS)
- Portfolio demonstrating a range of consumer products with Bluetooth, GPS, Electromechanical and 230V systems.
- Experience of working in a regulated industry sector such as medical devices, automotive or aerospace would be an advantage.
- Familiar with using electronic design automation software such as Altium.
- Experience in electric vehicle charging or relevant field
- Experience of OCPP / OCPI integration.
- Development experience of IoT related connectivity technologies e.g. Wi-Fi, BLE, ZigBee, Ethernet.
- App development experience for iOS / Android devices.
- Experience with Microchip PIC & Arm Cortex-M devices.
- Experience of working within a Quality System such as ISO 9001

Benefits

- Salary depending on experience.
- Working in the centre of Cheltenham.
- Free parking.
- Be part of a vibrant and growing design consultancy.
- An opportunity to develop an in-house electric / electronics team.