



## **Graduate Embedded Software Engineer - Electric Vehicle Chargers & Consumer Products**

Duku are a vibrant, well-established product design consultancy located in Cheltenham, Gloucestershire. We are offering an excellent opportunity for a Graduate Embedded Software Engineer to join our team to assist in the development of innovative electric vehicle charging equipment and a broad range of other projects including consumer products, mobility, health and fitness and medical devices.

We're looking for a motivated, passionate and personable individual with demonstrable experience in embedded software and hardware development. The successful applicant will ideally have experience with Embedded C/C++ and/or Python and experience of working across multiple Operating systems such as Linux, Android or embedded OS (eg Arduino, Microchip).

To be successful in the role you will need strong project management skills and be able to deliver projects on time to a high standard. You will be a self-starter, able to work well both independently and as part of a wider team and build strong relationships with the design team, suppliers and clients.

### **Skills & Responsibilities**

- Work alongside the product development team to develop and release software and firmware for our products.
- Embedded software development, maintenance and debugging for new products.
- Collaboration with electronics engineers on system-level design and specifying appropriate microcontroller / processors to meet product requirements.
- Troubleshooting faults, identify root cause and implement corrective action.
- Implement and manage third party integrations (eg API, Bluetooth).
- Generate software requirements, design, validation and verification documentation.
- Engage with stakeholders including to develop requirements and test methods.
- User interface development and integration.

### **Requirements**

- Degree in Electronics Engineering, Computer Science or related field.
- Good understanding of basic hardware and its interfaces with software systems.
- Ability to read electronics schematic diagrams, component data sheets and use standard hardware bench equipment (digital oscilloscope, logic analysers, signal generators, etc).
- Capable of developing code from either a blank slate or building on an existing codebase.
- Bare metal & RTOS microcontroller software development in C on resource-constrained devices (8-bit / 16-bit / 32-bit microcontrollers).

- Detailed understanding of microcontroller peripherals down to register level and have experience writing low-level drivers for SPI / I2C / UART / ADC / PWM / DMA /motor controllers etc.
- Experience with microcontrollers development tools, compilers and debuggers.
- Self-starter, complex problem-solving skills, attention to detail, methodical mindset and a fast learner.
- Strong communication, planning, and task management skills.

### **Desirable**

- Industrial experience in embedded software design for consumer electronics products.
- 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.

### **Benefits**

- Competitive salary.
- Working in the centre of Cheltenham.
- Parking available.
- Workplace pension scheme.
- Annual performance reviews and progression opportunities.