

Firmware Engineer

About the role

Location: London, UK
Salary: £45,000-50,000
Job Type: Full-time
Start Date: ASAP

Job Description

Are you a creative Firmware Engineer keen to get involved in shaping a growing business? Bare Conductive is looking for a strategic thinker who is passionate about their work and keen to learn. Someone who thrives on creating new products and processes, while working with an enthusiastic team of engineers and designers to add intelligence to the world around us. You'll be working directly with individual developers and some of the world's largest companies. We are at a critical point in our evolution and moving on to the next exciting chapter and that's where you come in.

About us

Bare Conductive is a dynamic and quickly growing company. We have an energetic team which excels in responding to new opportunities and isn't afraid to challenge the status quo; if there is a better way of doing something, we find it. If we don't find it, we create it ourselves. Our technology can make the surfaces or spaces where we live, work, and travel safer, healthier and more extraordinary. At Bare Conductive we envision a world of smart surfaces enabled through a technology stack that includes materials, hardware, firmware and software. We've sold hundreds of thousands of products to engineers, designers and developers around the world and are licensing our technology to global innovators and industrial partners.

Responsibilities

- Design, implementation, test and maintenance of firmware and bootloaders on new and existing products using predominantly ARM Cortex MCUs.
- Developing and maintaining automated production test procedures (ATE) in collaboration with the Electronic Engineering department.
- Designing, developing, testing and debugging GUI and terminal software on Mac, Linux and Windows.
- Interfacing with Electronic Engineering and Industrial Design departments during all phases of the design process.
- Providing postproduction support.
- Bring-up, validation and integration of new product designs (including designing tests to achieve this).
- Contributing to major component selection on new products.
- Using standard lab test equipment such as oscilloscopes, logic analysers and multimeters to verify design functionality.
- Writing and maintaining technical documentation.
- Maintaining a strong awareness of emerging trends in firmware engineering to drive strategic choices.
- Driving the long-term development strategy of the company, including toolchains, code style, best practices and future research.

Background

- Bachelor's degree or equivalent qualification in Electronic Engineering, Electronic and Information Engineering, Mathematics, Physics or a similar technical subject.
- 5+ years of industrial experience in embedded firmware development.
- Expert knowledge of C & C++ programming in an embedded context.
- Expertise in using Git for revision control.
- Familiarity with wired protocols such as SPI, I2C, CAN, USB, RS-422 etc.
- Familiarity with wireless protocols such as Bluetooth, WiFi, LoRa.
- Comfortable working in Mac OS, Linux and Windows environments.
- Experience with board bring-up of PCBs with programmable devices such as MCUs.
- Working knowledge of circuit board design, reading of PCB schematics and component datasheets.
- Taking ownership of our firmware and software development, including internal advocacy for this. A willingness to be an internal thought-leader.
- Good interpersonal and problem-solving skills.
- The ability to work both as part of a team and independently.

About You

- We're looking for a team player who enjoys working collaboratively, while maintaining the ability to self-direct and work autonomously.
- You should be comfortable building relationships with third party clients and suppliers, as well as communicating technical concepts to non-technical colleagues.
- We'll expect you to manage project deadlines and communicate effectively with the rest of the team.
- A natural problem solver, you'll be analytical and data-led, with a love for detail and ability to keep an eye on the bigger picture.

Please apply even if you feel you only match 60% of this job description. Culture and attitude are as important to us as skills, so we want to interview a diverse pool of candidates :-D

Benefits

- Work alongside an exceptional multidisciplinary team
- £45,000k – £50,000k Based on experience
- Competitive salary and employee share scheme, with annual salary reviews
- 28 days of paid holiday leave, plus an additional break during Christmas shut-down
- Flexible working negotiable.
- Travel loans. The company is happy to offer interest-free loans for season ticket holders who are traveling in by train
- Maternity/Paternity pay. We've doubled the statutory requirements for pay and work hard to facilitate the transition to maternity/paternity leave, and back into work.
- Pension plan contributions of up to 3%
- Cycle to work scheme
- Open and collaborative work environment
- Pets at work. We have some fantastic canine colleagues who make work more fun and less stressful
- Team lunch provided on birthdays - and a personalised cake!
- Unlimited access to office BBQ

How to apply

Send us an email with the information below to jobs@bareconductive.com, with the headline "2020 Embedded Engineer"

1. Full name and contact number
2. Cover Letter
3. We'd love to hear your thoughts on the rise of interpreted languages in embedded programming. Please tell us how you think that this can be reconciled with a drive towards low-power radio-connected devices? Tell us in a few sentences. This is a chance to pique our interest for a future deeper conversation.