

# Embedded Software Engineer

MOD Devices is looking to hire a Embedded software engineer to join our team. The company is located in Berlin, Germany. Soon MOD Devices is opening a new engineering office in Eindhoven, the Netherlands

## Company Background

MOD Devices is a music-tech company based in Berlin, developing the next generation of community driven hardware and software for musicians.

Believing in the premise of accessibility to spark creativity, MOD Devices relies on open software formats and a strong and engaged community to drive towards a positive revolution in the music gear market.

Located in the House of Music - <https://houseofmusic.berlin/> - inside the RAW complex near Warschauerstraße, our headquarters house inspirational brains coming from different countries and cultures, building software and hardware that empower artists, music producers and performers all over the world. Also, circulating in our building are hundreds of musicians that orbit the many companies from the House of Music, like Noisy Rooms and BIMM.

We are idea-centred makers, insight gathers and innovation hunters, willing to put technical, analytical and artistic brilliant minds together to guide our creations from concept to product release and content development. We believe in lean processes that privilege creativity and push technology boundaries. The consequence of that mindset has brought our products to feature in publications such as Sound on Sound, The Next Web, Guitar Premiere and Music Radar, besides winning awards in startup competitions across different continents.

Having successfully closed a major fundraising round, MOD Devices is ready to grow the team. Starting in 2020 MOD Devices is opening an engineering office in the city of Eindhoven to get closer to innovation and talented developers. If you think it fits you, help us keep the success story long and the future even more exciting.

## Job Description

We are looking for an Embedded Software Engineer who will be able to play a key role in the development and support of high quality audio processing units. You will work in a small multi-disciplinary project team. Together you will define requirements, architectures, develop and test embedded software systems for multiple audio effect processing controllers running on real time operating systems.

### **ESSENTIAL DUTIES AND RESPONSIBILITIES:**

These duties include but are not limited to:

- **Embedded Software Application:** Architecture, design, build, deliver and maintain embedded software/firmware for Cortex-M3 and Cortex-M0 Microcontrollers. Responsible for activities such as requirement analysis, documentation/procedures and implementation. To provide support for software instabilities, including diagnosis and resolution of technical problems of moderate scope and complexity ensuring the root cause of the problem is addressed.
- **Performance:** Ensure products perform and operate at scale (both for newly developed and existing products) for the full life cycle of development. Examine structures, architecture and code with an eye for instability and performance. Identify bottlenecks and ensure code meets design standards.
- **Quality Assurance:** Responsible for testing a product/products, developing test plans and test cases looking at the possibilities for test automation. Understand how the product will be used by the customer and develop test cases based on the product usage. Understand the architecture of the product being developed and understand the dependencies between different components.
- **Program Management:** Ensure successful, end-to-end delivery of projects through partnering with internal and external technical developers and coordination of all required activities and milestones. Perform regular tracking and reporting on scope, progress, and be accountable for initial results verification.

## Education

You have a Bachelor's degree in computer science, software engineering, electrical engineering, or equivalent

## Experience & Skills

- Solid programming experience in C/C++, Familiarity with Unix scripting (shell, Python)
- Experience with Microcontrollers. NXP LPC series is preferred.
- Knowledge of communication protocols (I2C, SPI, UART, Ethernet, I2S)
- Knowledge of Real-time software development
- Ability to use basic test equipment (eg: digital multimeter, oscilloscope)
- Ability to follow manuals and read diagrams
- Good command of English language
- Pro-active, able to take initiative and to work independently
- Good communication skills
- Musical instrument player is preferable

Please send your resume to [work@moddevices.com](mailto:work@moddevices.com)