Job Opening // Junior Embedded Firmware Engineer (IoT Domain)

Ahmedabad (India)

Tvilight is a global leader in intelligent lighting solutions, specializing in smart street lighting and IoT-enabled systems. Our innovative solutions help cities and utilities to achieve energy efficiency, operational savings, and enhance the quality of life for their citizens. Join us in revolutionizing urban lighting and IoT technology.

Job Description

We are seeking a highly skilled and motivated Embedded Firmware Engineer to join our team in Ahmedabad.

The ideal candidate should have hands-on 80% coding experience and 20% activities will require you to participate in code-reviews, problem-solving and processes. Your role will involve designing and developing wireless product portfolio (devices and gateway) for intelligent lighting and smart sensor applications.

Key Requirements

- Hands on experience in **developing firmware** and **component selection** as per application needs like selecting MCU, EEPROM and other sensor interfaces.
- **Should have spent at least 2 years in bare-metal programming** on 32-bit ARM cortex Microcontroller programming **on STM32** and other similar microcontrollers. Should be aware of using peripherals such as **ADC, TIMERs, UARTs, NVIC configuration, Interrupt priority** understanding, power-saving Modes etc. It would be plus to be familiar with STM32 development tools, STM32 cube IDE, STM32 Libraries, debugging etc.
- Hands-on experience on some of the communication protocols like **SPI, I2C, UART**, **WIFI, DALI, 1-wire, and MODBUS**.
- It would be plus to have knowledge working with any wireless stack such as **BLE-MESH** or Zigbee.
- Familiarity with CELLULAR or LORAWAN or similar LPWAN protocols is an added advantage.
- Should be able to debug Hardware to get embedded software working on it along with good electronics knowledge and **knowledge on using tools like logic-analyzer, CRO, Multi-meter, Signal-generator etc**.
- Exhibit problem-solving and analytical thinking abilities. Should be system-level thinker. Able to learn and apply new state-of-the-art tools and techniques and thereby showing experience in quick prototyping methods followed by structured implementation.

Be Familiar with

- Reading schematics, datasheets, technical reference manual and Silicon revision sheets
- Using tools like Logic Analyzer, DSO/CRO, Spectrum Analyzer.
- SW development tools: Confluence, JIRA, GIT, bit-bucket, SourceTree etc.

Professional Qualities

- No 9-to-5 thinking; should be goal driven with solution-oriented mindset and should meet deadlines with customer first attitude.
- Entrepreneurial spirit and a team-player showing capability and flexibility to work in a multi-cultural team environment.
- Open to travel to Netherlands or other locations of TVILIGHT or its customers when required.

Suitable Qualifications

- Masters or Bachelors in Electronics/Embedded-ICT Software.
- **Suitable Experience**: 3+ Years

About Tvilight?

TVILIGHT is a leading provider of Smart City solutions, specializing in intelligent lighting controls and IoT applications. Our mission is to create safer, more sustainable, and connected urban environments. With a global presence and a commitment to innovation, Tvilight is at the forefront of the smart city revolution. Intellikonnect Solutions Private Limited is a TVILIGHT affiliate company. For more information, visit us at: www.tvilight.com

Benefits

- Competitive salary and performance-based incentives.
- Comprehensive group medical insurance (for self, spouse and 2 kids).
- Flat hierarchy that emphasizes creativity and excellence.
- Opportunities for professional development and career advancement.
- Work in a dynamic and innovative environment focused on Smart City, IoT and AI solutions.

Contact Details

- Email: p.shah@tvilight.com
- Job application subject ID: **Junior Embedded Firmware Engineer**
- Website: https://tvilight.com/
- Office location: Ahmedabad, India (https://g.co/kgs/hBiaRfm)