

Job Opening: Solution Architect (Firmware)

Ahmedabad (India)

Are you an **Embedded Software specialist** interested in big data IoT applications? Do you want to change how cities manage their infrastructure around the globe? Do you want to code for a better world?

Background

IntelliKonnnect Solutions, a Tvilight company, is a European market leader in professional end-to-end lighting control solutions, with an installed base of over 600 projects in iconic cities across 20 countries. We specialize in sensors, wireless streetlight controls, lighting management software and IoT Smart City applications. We see streetlights as one of the most valuable public assets that have a powerful role to play in making cities energy-efficient, resilient and future-ready. Tvilight products create an independent open system that allows integrating a multitude of third-party applications and thus constitute a reliable, future-proof base for Smart Cities and IoT.

Job Profile

From day one, you will be working on a meaningful scalable IoT products that contribute to a cleaner environment. In this function, you will:

- Work on our core architecture and embedded software platform
- Make architectural design decisions
- Should be able to code using Embedded-C and should be very adept in bare-metal programming.
- Work closely with our software development team on total product integration, which includes backend/ fronted developers, java developers, firmware and QA engineers
- Be the one of the core firmware developers, and code from the requirement phase through to the deployment/ production phase
- Should be able to depict the Firmware architecture via flow-charts, UML diagrams and state-machine diagrams.
- Report directly to the Technical Director

Professional Qualities

- At least 8 years of experience as an embedded software developer, preferably in an IoT environment
- Experience with firmware architecture design
- Converting business requirements into software design HLD and LLD.
- Comfortable working with UML use-case diagram, class-diagram and sequence diagram to depict system architecture
- Experience with the following would be strong plus:
 - 32-bit ARM cortex microcontroller programming, reviewing and decoding (preferably on STM)
 - Communication protocols such as SPI, I2C, UART, Wifi, Dali, single-wire, Modbus

- STM development tools, STM32 cube IDE, STM32 libraries, debugging, etc.
- STM peripherals such as ADC, Timers, UARTs, NVIC configuration, interrupt priority, power-saving modes, etc.
- Wireless stack such as BLE mesh, Zigbee or similar (at least one project experience)
- Hands on experience with component selection e.g. MCU, EEPROM and other sensor interfaces
- Able to debug hardware with tools such as logic-analyser, CRO, multi-meter, signal-generator, etc.

Familiarity with

- Reading schematics, datasheets, technical reference manual and revision sheets
- Using tools like Logic Analyzer, DSO/ CRO, Spectrum Analyzer
- SW development tools: Confluence, JIRA, GIT, bit-bucket, SourceTree, etc.
- Knowledge on RTOS for embedded systems is a good to have. (e.g. FreeRtos or ThreadX)
- Embedded-C and python scripting
- Experience with NB-IoT or LORAWAN or similar LPWAN protocols would be a strong plus
- Must have good hands-on with Test-driven development for embedded software domain
- Should have worked with version control tools such as Git or SVN.

Personal Qualities

- System level thinker
- Problem-solver and analytical thinking abilities
- Result and goal-oriented mentality with customer first attitude
- Able to learn and apply new state-of-the-art tools and techniques
- 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
- A Bachelor or Master's degree in Electronics/ Embedded ICT Software/ Computer Engineering or a related technical field

Work conditions

- Location: Prahalad Nagar, Ahmedabad (India)
- Starting date: April 2020
- Competitive salary
- Attractive compensation benefits such as group Medical Insurance for self, spouse and 2 kids
- A rewarding career opportunity working with our team in India and the Netherlands
- Flat hierarchy that supports creativity & excellence

Interested in the world of IoT and Smart Cities?

Contact Details

Email: info@tvilight.com, hr-india@tvilight.com (subject ID: Job application: Solution Architect)

Phone: +91 (0) 79 4008 8520

Website: <https://www.tvilight.com/>