ESPHome Engineer – Advanced Configuration & Device Integration

SMLIGHT develops cutting-edge **smart home and IoT hardware**, including Zigbee, Matter, and multi-radio hubs, smart LED controllers, and modular Wi-Fi devices.
Our devices run platforms such as **ESPHome**, **Linux-based SMHUB-OS**, **SLZB-OS** and **custom firmware**, ensuring flexibility, transparency, and integration with major ecosystems like **Home Assistant**.

We are now looking for an **ESPHome Engineer** — someone who lives and breathes YAML, understands the internals of ESPHome, and can transform complex hardware configurations into efficient, elegant, and maintainable firmware builds.

What will you do

- Design and maintain **ESPHome configurations (.yaml)** for new and existing devices (Zigbee coordinators, LED controllers, IR transmitters, sensor modules, etc.)
- Implement and optimize **device logic, sensors, communication buses, and peripherals** (UART, I²C, SPI, ADC, PWM, GPIO, etc.)
- Develop **modular and reusable YAML templates** for product lines and internal projects
- Ensure **firmware compatibility** across multiple hardware variants (ESP32, ESP32-S3, etc.)
- Collaborate with hardware and firmware engineers to map pinouts, components, and features
- Integrate device configuration with **Home Assistant**, **MQTT**, and **API endpoints**
- Maintain **clear structure, documentation, and versioning** for all YAML builds
- Test, debug, and validate configurations on physical hardware
- Provide input for future hardware designs to improve ESPHome compatibility

Requirements

- Proven experience with **ESPHome** (advanced YAML configuration, custom components, lambda usage)

- Deep understanding of **ESP32 / ESP8266 microcontrollers** and hardware interfaces (UART, I²C, SPI, ADC, PWM, GPIO, etc.)
- Knowledge of **Home Assistant**, **MQTT**, and related smart-home ecosystems
- Experience debugging hardware-related issues (logs, compile errors, pin conflicts, etc.)
- Strong skills in **structuring and documenting** ESPHome projects
- Ability to work independently and propose improvements to hardware/firmware integration
- Familiarity with **electronics schematics, sensors, and peripheral modules**
- Basic knowledge of **Python / C++** (for ESPHome custom components) is a plus
- English proficiency for communication with the engineering team

Nice to have

- Experience with **Matter, Zigbee2MQTT, or Tasmota**
- Familiarity with **Jinja templates** and YAML modularization
- Prior contributions to **ESPHome community** or public repositories
- Experience working with **LED controllers, IR devices, or multi-radio hubs**

Please submit your application by this link: https://forms.gle/gUeGaQVb6kpeoyjb9

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