Anoumou Fostin KPODAR

Embedded Software Engineer · IoT & LoRaWAN

Remote
kafostin@gmail.com
portfolio.fostinos.com · LinkedIn · Upwork

PROFILE

Embedded software engineer, 4+ years of production IoT firmware: Zephyr, ESP-IDF, LoRaWAN, BLE, industrial protocols, test automation and CI.

EXPERIENCE

Embedded Software & IoT Consultant

Jul 2023 - Present

YOBIIQ B.V. · Geleen, Netherlands · Remote

- Zephyr / nRF Connect SDK firmware for LoRaWAN energy devices: smart meters, relay controllers, P1 readers (nRF54L15)
- Shared LoRaWAN & BLE platform: uplinks, downlinks, multicast FUOTA, BLE DFU, MCUboot
- ESP32 heating & cooling controller (ESP-IDF, FreeRTOS): Ethernet web UI, Modbus TCP/RTU, BACnet, MQTT OTA, OpenTherm; port to ESP-IDF v6.1
- Test & CI: Twister, host unit tests (CMock, sanitizers), QEMU integration tests, GitHub Actions
- JavaScript payload codecs, ThingsBoard dashboards, technical manuals, prototype validation

IoT Engineer

Nov 2022 - Jun 2023

OPENSNZ Technology · Oujda, Morocco

- Private LoRaWAN network: hardware selection, RAK & Kerlink gateways, ChirpStack
- Sensor integration, testing, monitoring (MQTT, Grafana), operations
- STM32L072 · Heltec LoRa · Linux · Docker · Python · Bash

Embedded Software Intern

Feb 2022 - Jul 2022

MAScIR Foundation · Rabat, Morocco

- Modbus RTU client & LoRaWAN stack on STM32L072 + SX1276 (UART, SPI, DMA, RTC, low power)
- Reverse engineering of a weather data logger authentication algorithm

TECHNICAL SKILLS

Languages	C · C++ · Python · JavaScript · Bash
RTOS & SDKs	Zephyr · nRF Connect SDK · ESP-IDF · FreeRTOS · ThreadX · STM32Cube HAL · Bare metal
Connectivity	LoRaWAN · FUOTA · Bluetooth LE · Wi-Fi · Ethernet · 3G/4G · MQTT · HTTP
Field protocols	Modbus RTU/TCP · BACnet · OpenTherm · DSMR P1
Buses	UART · I2C · SPI · I2S · CAN · LIN · USB
Hardware	nRF54 · nRF52 · STM32 · ESP32 · PSoC 6 · SX126x / SX127x · Raspberry Pi
Testing & CI	Twister · Unity · CMock · QEMU · pytest · GitHub Actions · Docker
Tools	Git · CMake · west · SEGGER J-Link · VS Code · Doxygen · Claude Code
IoT platforms	ChirpStack · ThingsBoard · Grafana

EDUCATION

Engineering Degree, Embedded Systems & Digital Services

Sep 2019 - Jul 2022

INPT, National Institute of Posts and Telecommunications · Rabat, Morocco

Microcontrollers · embedded OS · DSP · VHDL · PCB design · AUTOSAR · ISO 26262 · MISRA C

DEUST, Science and Technology

Sep 2017 - Jul 2019

Faculty of Sciences and Techniques · Fez, Morocco

LANGUAGES

French Fluent · **English** Intermediate

INTERESTS

Football · fitness · reading · music · cinema