



Yevhen Boichuk

Embedded & IoT Engineer

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ABOUT

Embedded engineer with 5+ years of experience taking IoT products from proof of concept to production — firmware, cloud connectivity, data pipelines and visualisation.

I write firmware for ESP32, STM32 and AVR microcontrollers, connect it to AWS IoT Core, and build the infrastructure around it with Lambda, DynamoDB, MQTT and Grafana. I also build Linux tooling in Python, Bash and Docker, and work on the hardware side — schematics, component selection and soldering.

Outside of client work I'm the main maintainer of Lilka, an open-source ESP32-S3 console, where I work on its operating system, SDK and tooling. I also build OpenTools — free calculators for embedded engineers.

EXPERIENCE

Embedded Engineer · NDA	May 2025 — Present
Embedded Engineer · T-Spark Engineering	Aug 2023 — May 2025
Embedded Engineer · NDA	Feb 2023 — Aug 2023
Embedded Engineer · Indeema Software	Dec 2021 — Dec 2022
Teacher · IT Step Academy, Cherkasy	Sep 2020 — Nov 2021
Teacher · Robocode, Cherkasy	Sep 2019 — Feb 2020
System Administrator · School #1, Cherkasy	Sep 2019 — Oct 2020

SKILLS

Embedded	C, C++, ESP32, STM32, RP2040, FreeRTOS
Cloud & IoT	AWS IoT Core, MQTT, Lambda, EC2, REST APIs
Software	Python, Bash, Docker, Linux
Hardware	Schematics, PCB, component selection, soldering, prototyping
Data	DynamoDB, MySQL, MongoDB, Grafana

PROJECTS

Lilka

GitHub ↗

Main maintainer of Lilka — an open-source ESP32-S3 handheld console built to teach embedded development. I work on KeiraOS, its FreeRTOS/C++ operating system, and wrote the [app catalog](#) and the browser-based flasher.

OpenTools

opentools.science ↗

Forty free browser-based calculators for embedded and electronics engineers — UART/SPI/I2C and CAN bit timing, STM32 timers, CRC, IEEE-754, PCB trace width and more.

Radar Plugin

GitHub ↗

Grafana panel plugin for visualising data from various radar types, rendering sweep data in real time.

WebSocket ⇄ Serial Converter

GitHub ↗

Bridges a serial port to WebSocket so device traffic can be piped straight into a Grafana WebSocket data source. Ships as a Linux service.

pocketTerm35

GitHub ↗

Keyboard firmware on the Pico SDK and TinyUSB — one composite USB device exposing a keyboard with an FN layer and a gamepad that doubles as a mouse.

embedded-umami

GitHub ↗

Umami analytics client in C for ESP-IDF, Arduino and Linux — pageviews, custom events and identify calls, with the platform detected at compile time.

LIFTS

Independent elevator quality assessment system — collects sensor metrics, stores, processes and visualises them.

Raz Odin

Article ↗

Agricultural ground drone — embedded control systems and telemetry. Shown at the Scientific Picnics festival in Ternopil.

Open to interesting embedded work — geri08311@gmail.com