

Vladislav Rajtmajer

Embedded C/C++ & PHP Backend Engineer

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[rajtik.com](#) · [github.com/rajtik76](#)

SUMMARY

Engineer working at the seam between hardware and the backend. An earlier decade in embedded and IoT: firmware in C on Atmel AVR and PIC microcontrollers, including a banknote validator, plus binary hardware protocols, telemetry data APIs and LoRaWAN. For the last 12+ years I have built the systems on the other side of that wire, in PHP and Laravel: REST and user-facing API design, PostgreSQL, and a test-first habit with Pest / PHPUnit. Ingesting data from field hardware across many device and payload versions is not a normal CRUD problem, and having written the firmware end makes the backend end better. Years of experience in English-only, SCRUM remote teams. Available for remote contract work across the EU.

CORE SKILLS

Embedded: C · C++ · firmware · microcontrollers · Atmel AVR · PIC · SPI · I2C · EEPROM · binary hardware protocols · IoT / LoRaWAN · telemetry data APIs · electronics

Backend: PHP · Laravel · REST API design · PostgreSQL · MySQL · Pest / PHPUnit · Linux · Docker · Git · CI/CD · Vue.js · React · TypeScript · Elasticsearch

EMBEDDED & IOT EXPERIENCE

Embedded, IoT and Systems Engineering

a decade, before 2016

- Firmware in C on Atmel AVR and PIC microcontrollers, including a banknote validator.
- Binary protocols between field hardware and servers; telemetry data APIs; LoRaWAN systems.
- Linux and Windows server administration; Delphi / FoxPro business applications.

SignalGenerator - AD9850 DDS on Arduino Uno (personal project)

2022

- AD9850 DDS driven over SPI, SSD1306 OLED over I2C, rotary encoder with a hand-written debounce class.
- Frequency edited digit by digit and persisted to EEPROM, so the device resumes after a power cycle.
- C++ · Arduino Uno (ATmega328P) · SPI · I2C · EEPROM · [github.com/rajtik76/SignalGenerator](#)

BACKEND & API EXPERIENCE

PHP Developer - Freelance (self-employed)

2022 - present

- Build web applications with REST and user-facing APIs.
- Laravel · Livewire · Vue.js · PostgreSQL

PHP Developer - UBK s.r.o.

2021 - 2022

- Laravel development across multiple client products.

Developer - Freelance

2018 - 2021

- Built a CMS for an international company. SCRUM, English-only daily communication.
- PHP 8 · Nette 3.1 · MariaDB

Developer - MySolutions s.r.o.

2016 - 2018

- Developed and maintained dating platforms across 12 countries. SCRUM, English-only standups.
- PHP · Nette · MySQL

SELECTED PROJECTS & OPEN SOURCE

- **CaptchaAPI** - GDPR-first, proof-of-work CAPTCHA for the EU; ships its own Laravel package and WordPress plugin.
Laravel · WordPress · Composer / Packagist
- **Billify** - invoicing REST API for the Czech market.
Laravel · REST API · PostgreSQL
- **Exile to Exile** - free, open-source Path of Exile 2 companion. Includes automated game-data releases with CI contract tests and safe activation / rollback.
Laravel 13 · PHP 8.4 · React · Inertia · TypeScript · PostgreSQL · Redis
- **POE2 Toolkit** - framework-agnostic TypeScript toolkit for binary GGPK archive access and typed game-data extractors; published as MIT npm packages.
TypeScript · React · npm · CI · MIT open source
- **Published packages:** captchaapi/laravel (Composer / Packagist), captchaapi (WordPress.org), @poe2-toolkit/* (npm).

EDUCATION & LANGUAGES

Secondary technical school, Maturita - **Electronics, Telecommunications and Computing**. SPS Ostrov.

English - working proficiency. Czech - native.