# **Christopher Farrugia**

Full Stack Developer & Linux Enthusiast Focused on IoT, Microservices, and Real-Time Systems

### **Summary**

A self-taught and results-driven software developer with over seven years of experience in designing and building scalable applications, including three and a half years in professional full-stack development. I specialize in creating clean, efficient, and maintainable solutions across both front-end and back-end technologies, including Vue.js, Node.js, Laravel, PostgreSQL/MySQL, Redis, RabbitMQ, Docker, and Linux server administration.

I've led multiple IoT integrations using LoRa, Sigfox, and NB-IoT, developing real-time systems that enhance user experience and operational efficiency. Currently, I'm deepening my expertise in Golang, TypeScript, and microservice architecture to build high-performance, event-driven applications that bridge hardware and software.

### **Relevant Experience**

#### Lead Software Developer · IoT Solutions Malta

September 2022 — Present

- Lead developer (and initially sole engineer) responsible for architecting, building, and maintaining the company's IoT and fleet-management platform

   covering server management, backend logic, microservices, and frontend integration.
- Designed and deployed real-time data pipelines for connected devices, including **Teltonika trackers** and custom **IoTPro sensors** (temperature, humidity, pressure, radar, generator).
- Developed Linux-based parsers to process TCP/UDP payloads, decode and structure telemetry, and forward data through RabbitMQ and Kafka, with Redis for caching and synchronization.
- Engineered full cloud integration for in-house IoTPro devices, implementing FOTA updates, bidirectional communication (uplinks/downlinks), and REST API integrations with ThingsBoard and internal dashboards for real-time monitoring and control.
- Manage Linux servers, Docker deployments, SSL configuration, and system monitoring to ensure platform reliability, scalability, and security.
- Collaborated on external projects such as machine-data collection for the Malta Gaming Authority and a Laravel dashboard for Marine Hound visualizing harbour-emission data (SO<sub>2</sub>, CO<sub>2</sub>).

# **Selected Project**

**iotrack.live** Full-Stack IoT & Fleet Management Platform https://iotrack.live ¬ Personal side project built to explore scalable, real-time IoT architecture. A full-stack application enabling live tracking and telemetry for vehicles, people, and assets — developed with **Vue 3**, **TypeScript**, **Golang**, **Node.js**, **RabbitMQ**, **Redis**, **PostgreSQL**, **Docker** and **Linux**.

Includes live map visualization, automated reporting, and real-time microservice communication designed to mirror production-level IoT systems.

chris12aug@yahoo.com (356) 79310212 github.com/foxcodenine , github.com/ChrisFarrugiaDev https://www.linkedin.com/in/christopher-

chrisfarrugia.dev

farrugia-3a51184b/

#### **Skills**

#### **Programming Languages**

JavaScript, TypeScript, PHP, Golang, HLML, SASS & CSS

#### **Libraries & Frameworks**

Vue JS, React, Laravel, Node JS, Tailwind, Bootstrap

#### **Database Management**

MySQL, PostgreSQL, MongoDB, Redis

#### DevOps & Tools

Linux & Bash, Docker, Apache, RabbitMQ, Kafka, Git & GitHub

#### **Certifications**

#### MQF Level 5

'VET Award for Development with MySQL and PHP'

# **Zend Certified Enginneer** PHP 7.1 ZENDO33155

PHP /.I ZENDUSSISS

# **LPIC-1 Linux Administrator** lpi.org/v/LPI000519379/fpjv2febd3

## Languages

English speak, read, writeMaltese speak, read, write

**Italian** speak

#### **Interests**

**Distance Running:** Regular participant in local and international half-marathons.

Chess: Passionate about strategy and continuous improvement through online study and practice.

Volunteer Work: Served with St John Ambulance (2012—2020), Personal Interests: Learning,

photography, & painting.