side
Zalka Ernő
Software Engineer Test Engineer
Fót, Hungary
+36 20 973 9213
ern0plus4+2023@gmail.com
https://github.com/ern0

Skills

C â˜…â˜…â˜…â˜…â˜…
C++ â˜…â˜…â˜…â˜…â˜…
Python â˜…â˜…â˜…â˜…â˜…
Linux Dev â˜…â˜…â˜…â˜…â˜†
Microservices â˜…â˜…â˜…â˜…â˜†
Embedded Systems â˜…â˜…â˜…â˜…â˜…
Rust â˜…â˜…â˜…â˜†â˜†
SQL â˜…â˜…â˜…â˜…â˜†
Key-Value DB â˜…â˜…â˜…â˜…â˜†
PHP â˜…â˜…â˜…â˜…â˜…
JavaScript â˜…â˜…â˜…â˜…â˜†
HTML/CSS â˜…â˜…â˜…â˜…â˜†
Java â˜…â˜…â˜…â˜†â˜†
Assembly, Demoscene â˜…â˜…â˜…â˜†â˜†
OOP Design â˜…â˜…â˜…â˜…â˜…
Documentation â˜…â˜…â˜…â˜…â˜…
Multithreading â˜…â˜…â˜…â˜…â˜†
Dataflow Systems â˜…â˜…â˜…â˜…â˜…
Unit Testing â˜…â˜…â˜…â˜…â˜†
Integration Testing â˜…â˜…â˜…â˜…â˜…
GIT â˜…â˜…â˜…â˜…â˜…
Mentoring, Teaching â˜…â˜…â˜…â˜…â˜†
MUMPS â˜…â˜…â˜…â˜…â˜…
ERP â˜…â˜…â˜…â˜…â˜…
Image Editing, GIMP â˜…â˜…â˜†â˜†â˜†
Music Production â˜…â˜…â˜…â˜…â˜…

Languages

Hungarian â˜…â˜…â˜…â˜…â˜…
English â˜…â˜…â˜…â˜…â˜†

Innovative and dedicated software developer, architect and mentor with experience in various fields and roles. Focused on long-term goals: quality, maintainability, smooth development process. Not only creates clean, modular, maintainable code, but inspires and helps others to do the same, educates and supports young talents. Enjoyed programming since teenager age and still does. Actual brain problem: learning Rust, created first crate and working on a larger multi-client system.

Experience

Test engineer
2023-2024
YottaDB LLC, contractor
* Create integration tests (CSH, Expect, MUMPS) * Implement/fix platform modules (C, Rust)

Principal C++ Developer
2023
Harman-Kardon Kft.
Maintain automotive modules (C++)

Principal embedded developer, product validation engineer
2019-2022
Heitec Kft.
Implement healthcare product firmware (C)
Create end-to-end test framework and tests (Python)
Create test applications for embedded devices (C, C++)

Principal C++ developer
2017 – 2019
CAE Engineering Kft.
Implement flight simulator functions (C++)
Desing and implement tools (Python)
Mentoring developers, create educational materials (C, C++)

Web frontend developer, test engineer
2016 – 2017
EcoStudio Kft.
Design and develop microservices architecture application (JavaScript, Node.js, Haxe, RethinkDB, RabbitMQ)
Create test framework and tests for microservices (Python, Hack)
Re-implement core Haxe functionality in Python

Web developer
2013 – 2016
Netavis Kft.
Design and implement web clent for video surveillance system

Creating smaller utilities (Python, PHP, Java)

Principal embedded developer

2011 â€" 2013

Intep Kft.

Re-implementation of Makingthings embedded development framewrk for Linux (C)

Complete firmware for LAN-RS232 / LAN-RS485 interface * Embedded app (C) * Configuration web UI (JavaScript) * Manufacturing preparation tool

Outdoor LED wall firmware * Font renderer, with auto kerning (C++) * API for external applications (C++) * Reference external application (JavaScript) * Created custom font

Payment kiosk firmware * Core logic, state machine (C++) * Autodoc creator for state machine (PHP, GraphViz) * Note and coin acceptor, bank card reader etc. Integration (C++) * Customizable web UI (JavaScript)

Modular documentation system for generate datasheet PDFs (PHP, Wkhtmltopdf)

System architect, C++ developer

2006 â€" 2011

Porion Kft., Bitklub Kft.

Digital television (DVB) SI/EPG inserter * system design and implementation (C++) * SI/EPG administration backend and admin UI (PHP, JavaScript) * The competition is suspected us of stealing the EPG system of Conax, the industry leader software (which is slow and expensive) * In 2024, the system is still used at various cable providers

Video stream jukebox server design and implementation (C++)

* Full stack developer * Java developer * CTO * SEO expert

2000 â€" 2006

VendÃ©gvÃ¡rÃ³.hu project * Index.hu Rt. (the internet portal) * Windex Kft. (project company, short lived) * Rakit Kft. (startup - partner) * Well-Press Kft., Miskolc (publisher, marketing)

VendÃ©gvÃ¡rÃ³.hu (market leading touristic portal) * design, implement and run touristic portal (PHP, HTML, CSS) * use SEO techniques to increase number of visitors

Design and Iimplement a lite AdServer for VendÃ©gvÃ¡rÃ³.hu (PHP, HTML+CSS)

Design and implement Google position rank monitoring tool for support and measure SEO results (Java, PHP, HTML, CSS)

Java developer

1999 â€" 2000

Nokia NWSS (the internet portal)

Creating games for WAP enabled mobile phones (JAVA, WML)

File patents (cca. 2-3)

IT departement leader (CIO)

1996 â€" 1999

Grabo Holding Rt â€" Uniontext Kft.

Set up a complete software development and operation department almost from the ground, run the entire companyâ€™s IT

ISO 9001 compilant logistic system design and supervision

Preliminary cost calculation system design

Enterprise MUMPS developer

1989 â€" 1996

Grabo Holding Rt â€" Graboplast Kft.

Write business applications and modules for in-house developed ERP system (MUMPS)

Create UI frameworks (MUMPS)

Administrating HP-UX systems

MS-DOS â€" Unix inter-system data transfer protocol design, implementation (8086 Assembler)

Stock Register Book system design, backend imeplementation (FoxPro, dBase)

Education