

README.md

preview

Ylya Martchenko

Full Stack Developer · AI · Systems Engineer · Cloud · IoT

French Citizen (EU) · Available now



CS & Systems Engineer (Polytech Nancy · IA2R) specialising in resilient, secure distributed systems. I bridge full-stack (Spring Boot, React/Angular) + secure cloud (Kubernetes, CI/CD) + critical embedded IoT/OT (LIN/CAN, FreeRTOS, ESP32), across the whole lifecycle – requirements, architecture, deployment, SRE.

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🐙 HoodieYlya13

🌐 in/ylya-martchenko

🌍 French C2 · English C1 · Russian C1



→ Explore my portfolio

Live interactive demos & code repositories

hyl3dev.com

git history

(Equasens) [2023/09 – Present] Full Stack Developer (apprenticeship)

ConfluenceBot – Multi-agent FastMCP & LangGraph RAG over Confluence. Strict 4-layer boundary: prompt hardening, ACL filters, verification nodes & leak scanners → 0% leakage, 100% RBAC. ↗

Gift cards program – Architected an internal admin module (Spring Boot · Angular) & Bifrost (RabbitMQ) event-driven pipeline to target local id. pharmacy servers. Integrated internal/Aquitem card profiles and dynamic tenant routing.

SSO for Wellpharma & click & collect – Unified auth: Equasens' Wellpharma app & partner Pharmao's click & collect via Capacitor in-app browser (RFC 8252). Keycloak/OIDC IdP, Spring Security JWT, Helm values for HDS k8s; Rust reverse proxy syncing pharmacy whitelists daily.

Steve Jobs Prize @ Olymp'Id 2025 – Secure agentic architecture of id. prime+ assistant concept (Anthropic MCP, custom GDPR-compliant session tokenization).

(Schumacher-Knepper) [2025/06 – 2025/09] Tech Lead / Full Stack Developer (internship)

E-shop – bespoke Shopify theme in Liquid & CSS (100/100 Lighthouse), checkout-interception security gateway, FR|DE|LU|EN. ↗

Pull Request

Equasens → your-team:main “feat: onboard Ylya Martchenko 🚀”

✓ all checks passed · ready to merge

projects.yaml

--architecture-r&d

1 projects: # hyl3dev.com/projects ↗

1 - name: TesLimitless # hyl3dev.com/projects/teslimitless ↗

2 stack: [C++, FreeRTOS, ESP32, LIN-bus, CAN-bus, BLE, React Native]

3 impact: Physical LIN/CAN MITM gateway on Tesla Model 3 (FreeRTOS ESP32, BLE, React Native HUD). Restored steering capacitive commands & diagnostic macros; isolated safety-critical tasks → sub-1.5ms latency, 0 frame errors.

4 - name: YlyaBot # hyl3dev.com/projects/yllya-bot ↗

5 stack: [Next.js 16, React 19, Supabase, pgvector, Redis, JWT]

6 impact: Decoupled RAG recruitment agent & SRE dashboard. PostgreSQL cosine similarity via PL/pgSQL RPC, 5-level fallback cache in Redis to prevent 429 limits, JWT security → 100% uptime, first token <150ms.

7 - name: Grid Sentinel # hyl3dev.com/projects/grid-sentinel ↗

8 stack: [Django, Scikit-Learn, Ansible, Puppet, PostgreSQL]

9 impact: Self-healing SRE console. Scikit-Learn Isolation Forest model detects leaks on normalized telemetry; automated closed-loop Puppet/Ansible remediation → caught +4.5%/loop leak, 0 false reboots.

skills.lua

--stack

1 return { -- ● hot · ● known

2 web = { TypeScript/JavaScript, Next.js, React, Angular, Tailwind CSS, React Native, WebSocket/SSE, Liquid (Shopify), Figma },

1 backend = { Java/Spring Boot, Python/Django, Rust, Microservices, REST/GraphQL, MCP, RAG, PostgreSQL/pgvector, Redis, SQLite, ChromaDB, RabbitMQ/Kafka, Hexagonal/DDD/SOLID, C#/.NET },

2 cloud = { CI/CD, Git, GitHub/GitLab CI, Docker, Kubernetes, Helm, ArgoCD, Ansible/Puppet/Terraform, Linux/Bash, Azure },

3 iot_ot = { C/C++, ESP32, FreeRTOS, LIN-bus, CAN-bus, SPI/I2C/UART, BLE, Metrology, Matlab/Simulink, Procurement & HW Specs, CAD, Modbus, MQTT/CoAP },

4 security = { OAuth2/OIDC/JWT, Zero-Trust/IAM, AI/RAG Eng, AI Coding & Agentic Tools, NIS2/GDPR, WASM Sandbox, Prometheus/Grafana, OpenTelemetry/SRE/ML, JVM Internals, Postman/Insomnia },

5 methods = { Agile/Scrum, Product Lifecycle, Requirement Elicitation (US/UC), User Journeys, UX/UI, BPMN, Cross-functional },

6 }

NORMAL

Equasens

✖ 0 ▲ 0

1 PR · mergeable

utf-8

resume

100%