

Ioannis Noukakis

FULLSTACK SOFTWARE ENGINEER · DEVOPS ENGINEER

Vevey, Switzerland

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“Fullstack software engineer with a passion for Test Driven Development. Enthusiastic about embracing new challenges and exploring cutting-edge tools.”

Experience

European Broadcasting Union (EBU)

Geneva, Switzerland

FULLSTACK/DEVOPS ENGINEER

2023 - Present

The EBU is the world's leading alliance of public service media. Work on Eurovox, EBU's multilingual platform enabling member broadcasters to ingest, transcribe, translate, and re-voice content across languages. It is made of two components: a user-facing tool for navigating and processing content, and an API integrating Eurovox systems with third-party AI vendors.

- Platform scale: 52.5k transcription hours, 1.25B voiced characters, 34.9B translated characters, serving 1 440 users across 60 organisations.
- Eurovox Project - Tool: Added multi-speaker re-voicing capabilities, voice cloning, and C2PA content authenticity signing.
- Eurovox Project - Tool: LLM-assisted translation and pre-processing features, leveraging models from OpenAI and Google via OpenRouter.
- Eurovox Project - Tool: Stripe integration for subscription management and billing; custom backend for access control with immutable billing logs on AWS KMS and S3.
- Eurovox Project - API: Implemented a unified file translation API across multiple vendors (AWS, Deepl, etc).
- Live dubbing pipeline with real-time audio streaming using the ElevenLabs real-time API and AWS Transcribe.
- <https://tech.ebu.ch/eurovox>

Droople

Puidoux, Switzerland

FULLSTACK ENGINEER

2022 - 2023

Droople provides connected water sensors over LoRaWAN and an ML platform to run usage predictions, targeting smart water management for buildings and industry.

- Improved codebase maintainability by transitioning from manual testing to a fully automated regression testing system using TDD.
- Implemented visual regression testing using Cypress in combination with Percy.
- Collaborated with the hardware team to develop automated end-to-end testing solutions, using Arduino for signal generation and Python 3 as the primary test driver for IoT devices with no over-the-air update support.
- <https://www.droople.com/>

Migros Online

Ecublens, Switzerland

BACKEND SOFTWARE ENGINEER

2022

Migros Online is Switzerland's leading online retailer for consumer goods, operating a large microservices platform.

- Maintained a Java microservice responsible for generating purchase orders based on inventory state from the upstream supply service.
- Improved unit test reliability by replacing a shared development database with isolated Docker containers.
- <https://www.migros.ch/>

European Broadcasting Union (EBU)

Geneva, Switzerland

FULLSTACK/DEVOPS ENGINEER

2018 - 2022

Development of proof of concept of the Eurovox platform and transition to fully fledged product (see above).

- Realtime Transcription Frontend: Collaborated with France Television to build a real-time transcription display tool, leveraging TDD and Hexagonal Architecture.
- News Pilot Project: Created a B2B tool for navigating news articles from EBU member sources, with automatic processing and translation via the Eurovox project.
- Eurovox Project - Tool: Developed a user-oriented interface for navigating, transcribing, and translating multilingual content.
- Eurovox Project - API: Built an API integrating EBU member production systems with third-party AI vendors (AWS, Deepl, Azure, Speechmatics), supporting batch and streamed transcription.
- <https://tech.ebu.ch/groups/products>

Welitics

Lausanne, Switzerland

FRONTEND ENGINEER & CO-FOUNDER

2017 - 2018

Welitics was a free political social network aimed at broadening civic participation.

- Developed the frontend in React with Apollo Client, including a custom Apollo link to encode and upload images as base64 via the GraphQL API.
- The GraphQL backend was built in Play Framework (Scala) by co-founders; integrated and consumed its API from the frontend.

Skills

Programming	TypeScript, Java, Kotlin, Python 3, C++ (basic), Rust (basic), Golang (basic)
Frontend	React, Redux, Redux-Toolkit, Jest, Three.js, Cypress
Backend	Spring, fastify.dev, FastAPI, Project Reactor, RabbitMQ, Redis
DevOps	AWS, Terraform, Kubernetes, ArgoCD, Docker, Prometheus, Grafana
Testing	TDD, Hexagonal Architecture, Visual Regression Testing (Percy), IoT Testing (Arduino/Python)
Languages	French (native), English (C1)

Education

digicomp.ch

Geneva, Switzerland

WEB APPLICATION SECURITY DEEP DIVE (SWOA)

2025

- SWOA is a comprehensive training program that covers the fundamentals of web application security, including common vulnerabilities, attack techniques, and mitigation strategies. The course includes hands-on labs and real-world case studies to provide practical experience in identifying and addressing security issues in web applications.
- <https://www.digicomp.ch/en/courses/web-application-security-deep-dive-swoa>

HEIG-VD (Haute École d'Ingénierie et de Gestion du Canton de Vaud)

Yverdon-les-Bains, Switzerland

B.S. IN COMPUTER SCIENCE

2013 - 2017

- Thesis title: "Plant Village, dataset bias quantisation for convolutional neural networks in plant disease detection", supervised by Prof. Marcel Salathé at Digital Epidemiology Lab - EPFL and Dr. Perez-Urbe Andres at HEIG-VD.
- [https://github.com/ioannisNoukakis/Bachelor-2017/blob/master/Bachelor work report.pdf](https://github.com/ioannisNoukakis/Bachelor-2017/blob/master/Bachelor%20work%20report.pdf)

Gymnasium of Morges

Morges, Switzerland

COMMERCIAL PROFESSIONAL MATURITY

2012 - 2013

Personal Projects

Re-Do

TDD - KOTLIN - SPRINGBOOT

- Re-Do is a scheduler service for Task Execution Graphs (TEGs) - a directed acyclic graphs of tasks where each task can consume artefacts produced by its predecessors. This allows the user to define complex workflows with interdependent tasks, and the service will execute them in the correct order while maximizing parallelism. The project is built in Kotlin using Spring Boot and applies TDD and Hexagonal Architecture.
- <https://github.com/ioannisNoukakis/re-do>

Just The Jar

DOCKER - BUILDX

- Minimal Java runtime docker image for running Spring Boot applications on Alpine/musl or Ubuntu/glibc. Based on Scratch image with only the required native dependencies for running the JVM. Either full JDK or JRE flavors are available as base images.
- <https://github.com/ioannisNoukakis/justthejar>

Midnight

RUST - WEBGPU - QUATERNIONS

- Rust-based WebGPU renderer for 3D scenes. The project is a playground for learning Rust, WebGPU and explore mathematical concepts in 3D rendering like quaternions and geometric algebra.
- <https://github.com/ioannisNoukakis/midknight>