Joel Revuelta Gómez

Software Engineer | Full-Stack, Backend & Systems

joel.revuel@gmail.com | +34 622 15 34 47 | Barcelona, Spain | joel-revuelta.github.io | github.com/Joel-Revuelta | linkedin.com/in/joel-revuelta

PROFILE

Versatile Software Engineer with experience spanning full-stack web products, backend microservices, AI workflows, and low-level systems/GPU computing. Proficient in C++20, TypeScript, Go, Python, and Java—building everything from user-facing applications and distributed APIs to multithreaded CUDA renderers and Linux kernel tooling.

EXPERIENCE

Software Developer Intern | NTT Data **Oct 2023 – Dec 2023, Oct 2024 – Aug 2025**

- Co-developed a blood and tissue bank management system for Banc de Sang i Teixits using Java Spring Boot microservices and Angular.
- Designed reactive user interfaces and core operational workflows, streamlining daily clinical and logistics tasks for end users.
- Implemented automated unit and integration test suites, strengthening release stability across a cross-functional engineering team.

TECHNICAL SKILLS

Languages: C++, C, TypeScript, JavaScript, Go, Python, Java, SQL, Haskell, Kotlin
Web & Backend: Next.js, Angular, React Native, FastAPI, Gin, Spring Boot, NestJS, Node.js, Express.js, REST APIs, OAuth2, AI / LLM Integration
Systems & Graphics: CUDA, Linux Kernel Modules, eBPF, ptrace, Multithreading, Concurrency, OpenGL, SFML, SDL2, CMake, Conan
Databases & DevOps: PostgreSQL, MongoDB, Docker, Docker Compose, GitHub Actions, Git, Linux

SELECTED PROJECTS

FAS – AI Contract Generation Platform | *Go, Next.js, PostgreSQL, AI Integration* fas-ai.net

- Built an AI contract generation platform for freelancers and small agencies in Spain that turns client video calls into structured service agreements.
- Engineered automated call ingestion, transcription, and AI term extraction in Go and PostgreSQL with a Next.js review workflow prior to signing.

RayTracer – C++20 CPU & CUDA GPU Path Tracer | *C++20, CUDA, CMake, OpenGL, SFML* github.com/Joel-Revuelta/ray-tracer

- Architected a plugin-based C++20 path tracer supporting dynamic runtime loading of primitives, materials, lights, GUI backends, and renderers.
- Implemented multithreaded CPU and CUDA GPU renderers with full feature parity, BVH acceleration, OBJ/MTL meshes, and OpenGL/SFML previewers up to 8K.

AREA – Multi-Service Automation Platform | *FastAPI, Next.js, React Native, PostgreSQL, Docker Compose* github.com/Joel-Revuelta/area

- Co-developed an IFTTT-style automation platform in a 5-person team with OAuth2 service connections and a visual Actions-to-REActions workflow editor.
- Built FastAPI microservices backed by PostgreSQL, a Next.js web dashboard, and a React Native Android client orchestrated with Docker Compose.

Syscall Sandbox – Linux Process-Tree Syscall Sandbox | *C, eBPF, Linux Kernel Module, ptrace* github.com/Joel-Revuelta/syscall-sandbox

- Built a Linux security sandbox combining an eBPF monitor, a custom kernel module, and ptrace to observe, track, and block syscalls across process trees.
- Hooked raw_syscalls and sched_process_fork tracepoints and exposed runtime policy controls via /proc/syscall_sandbox.

City Matcher – AI-Powered Destination Recommender | *Angular, Node.js, OpenAI API* city-matcher-sigma.vercel.app

- Won 1st place at the 2024 Extia Hackathon by building an OpenAI-powered web application that generates personalized destination recommendations from user preferences.

EDUCATION

EPITECH · Koç University **2025 – Expected 2027**
Master's in Software Development and Information Technologies

EPITECH – European Institute of Technology **2022 – 2025**
Bachelor's in Software Development and Information Technologies

LANGUAGES

Catalan: Native | **Spanish:** Native | **English:** Professional Proficiency