KILIAN ROIG

Software Engineer

@ roigmartinezkilian@gmail.com   ☎ +34 609 178 651   📍 Barcelona, Spain
in https://www.linkedin.com/in/kilianrm   https://kilianrm.github.io ⓘ https://github.com/kilianrm

PROFESSIONAL EXPERIENCE

Software Engineer
ASE OPTICS EUROPE

📅 Jun 2025 – Sept 2025   📍 Barcelona, Spain

SKYFUSION & ECOSWIR
- Worked on **R&D software projects** focused on perception systems, sensor data processing, and automated inspection platforms
- Designed and developed **backend** and data-processing applications in **Python** for multi-sensor systems
- Contributed to **system design** and implementation of **client–server** solutions

Software Engineer
INDRA ESPACIO S.A.

📅 Sept 2022 – May 2025   📍 Barcelona, Spain

ECHOES – Startical
- Developed and maintained **C++/Qt software** for an aeronautical communication system
- Investigated and resolved defects in core components, improving system stability and reducing critical incidents
- Designed, implemented, and validated new features using simulation-based test campaigns

ROUTLEO – Startical
- Contributed to the development of a custom routing solution implemented in **Python**
- Reimplemented and optimized the routing solution in **C**, focusing on real-world constraints and performance
- Developed **Python tooling** for simulation, analysis, testing, and automation
- Executed system-wide test campaigns and produced technical documentation

EDUCATION

Bachelor's Degree in Computer Engineering
Specialization in Information Technologies
Universitat Politècnica de Catalunya (UPC)

📅 2018 – 2022   📍 Barcelona, Spain

COURSES & CERTIFICATIONS

Professional Training
INDRA SISTEMAS S.A.

- Operating Systems Fundamentals for Communication Systems — 40 hours
- C++ Programming — 40 hours
- Introduction to IP Networks — 40 hours
- Introduction to Docker and Kubernetes — 40 hours

SKILLS

Principal
- Programming Languages: Python, C, C++, Bash
- Cloud & DevOps: Docker & Docker Compose, CI/CD (GitHub Actions), AWS
- Networking: TCP/IP, UDP, LAN, VLAN, NAT, SDN, DNS
- Other: Qt, Git, PyTest, Wireshark
- Languages: Spanish (native), Catalan (native), English (B2)

Secondary
- Backend technologies: Node.js (JavaScript), FastAPI (Python)
- API styles: REST, WebSockets
- Data storage: Relational, MongoDB

PROJECTS

Recruitment Web Platform
Full-stack web application with Node.js REST API, React frontend, authentication and basic security practices.
2021 – 2022 · Barcelona, Spain