Santiago Rodriguez Cetran

Semi Senior Software Developer | Backend (Python) | Cloud & GenAI Integration

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Location: Buenos Aires, Argentina

PROFESSIONAL PROFILE

Semi Senior Software Developer with 3+ years of experience in Python backend development, cloud-native architectures, and full-stack web applications. Specialized in REST APIs, microservices, and AWS-based services. Leveraging Generative AI since 2023 to accelerate development, continuously researching and refining the most effective methodologies and prompt engineering to maximize outcomes with these tools. Hands-on experience with AI agents, having used platforms such as Pi and Hermes with LLM-based APIs to design and experiment with agentic workflows. Background in multimedia design that brings a comprehensive vision to user interface development.

WORK EXPERIENCE

Semi Senior Software Developer | BlinkTrip

September 2024 - May 2025

- Worked on the migration of the backend from a manual workflow to a serverless microservices architecture on AWS (Lambda, DynamoDB, S3), enabling automated and scalable processing of client travel requests.
- Developed business logic in Python to orchestrate the full search flow: parsing client queries, integrating real-time flight and hotel provider APIs for availability and pricing lookups, and returning structured results.
- Configured CI/CD pipelines with GitHub Actions for automated Lambda deployment and infrastructure updates.
- Performed debugging, log analysis, and application monitoring in AWS environments.
- Used generative AI (primarily Cursor) to accelerate code iterations and expand unit testing, improving delivery speed and quality.

Technologies: Python, AWS (Lambda, DynamoDB, S3), Docker, GitHub Actions, REST APIs

Semi Senior Software Developer | AlterMundi

January 2023 - April 2026

LibreIncu Project - IoT Monitoring System for Incubators - Open-Source

https://github.com/AlterMundi-MonitoreoyControl/Proyecto-Incubadora

- Contributed to the development of 10 functional prototypes with temperature and humidity sensors.
- Developed real-time monitoring application for incubators.
- Implemented API integration for IoT and microcontroller communication.
- Impact: Active prototypes in multiple communities with hatching rate exceeding 80%.
- Used generative AI (ChatGPT) as support for code queries, IoT/API integration, and prototype troubleshooting.

Technologies: Lua, REST APIs, IoT, Microcontrollers, Sensors

WANDA Project - Distributed Astrophotography System - Open-Source

https://github.com/altermundi/wanda-telescope

- Led the development of the web app for the Raspberry Pi 5-based astrophotography system.
- Developed backend in Python with Flask and SocketIO for real-time communication.
- Implemented MJPEG streaming and camera controls (IMX477 HQ) with live parameter adjustment (ISO, exposure).
- Integrated hardware: camera modules and GPIO for stepper motors.
- Developed frontend with Next.js, React, and TypeScript.
- Configured deployment with Nginx/systemd and implemented unit tests with pytest.
- Applied generative AI (Cursor and v0) to iterate UI versions and accelerate features, refactors, and test generation, ensuring changes are validated via runtime verification and manual review.

Technologies: Python, Flask, SocketIO, WebSockets, Next.js, React, TypeScript, Raspberry Pi, GPIO, Nginx, Cursor, v0

SAI Project - Fire Alert System - Open-Source

- Participated in the planning and architecture definition of the computer vision-based early fire detection system.
- The system uses cameras with a YOLO model trained by AlterMundi for real-time smoke detection, generating bounding boxes and automatic alerts.
- Collaborated in project dissemination at fire stations and DevConnect 2025.
- Participated in technical decision-making meetings regarding development continuity.

Technologies: YOLO, Computer Vision, Python, IP Cameras

EDUCATION

Technical Degree in Multimedia Design | Da Vinci School

2020-2024 | Completed

- Specialization in audiovisual design, motion graphics, and 3D modeling.
- Fundamentals of web programming and video game development in Unity (C#).
- Thesis completed and approved.

Bilingual High School | St. Luke's College

2013 - 2018 | Completed

- Focus: Natural Sciences.
- Bilingual Spanish-English education.
- Cambridge IGCSE Certification.

TECHNICAL SKILLS

Generative AI

- Primary tools: Claude Code + Codex + Cursor
- LLM APIs: OpenAI, Anthropic
- Agents: Hermes and Pi
- Prompt engineering

Backend and Programming

- Python: Flask, FastAPI, SocketIO, REST APIs, business logic
- Bash: Scripting, Linux system administration

Frontend

- JavaScript/TypeScript: React, Next.js
- HTML/CSS

DevOps and Cloud

- AWS: Lambda, DynamoDB, S3, CloudWatch
- Docker: containers, images, docker-compose
- CI/CD: GitHub Actions
- Deployment: Nginx, systemd
- Testing: pytest

IoT and Hardware

- Microcontrollers, sensors, GPIO
- Raspberry Pi, camera integration

Version Control

- Git: Terminal, branching, merge, workflows
- GitHub: Actions, collaboration, code review

LANGUAGES

- **Spanish:** Native
- **English:** Advanced / Fluent