

Oscar Fernandez

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Experience

Co-Founder & CTO

April 2026 – Present

Intake · Lanzadera, Valencia

AI-powered helpdesk for B2B companies: an AI agent that answers their customers on WhatsApp, web chat and email, with a shared inbox and help center. In production with paying customers.

- Led backend, AI and infrastructure end to end, from architecture to production operations, shipping 95+ releases since launch with a 4,600+ test suite
- Built an **agentic** customer-support system: a **Claude** tool-calling loop over each company's knowledge base (RAG), third-party and customer APIs via MCP, with guardrails and human handoff, running on Anthropic API and Amazon Bedrock EU with prompt caching and per-tenant cost tracking
- Designed the evaluation pipeline behind every AI change, using LLM-as-judge scoring of real conversations, retrieval benchmarks and blind model comparisons to choose, tune and migrate models
- Implemented the **Model Context Protocol** on both sides: an MCP server with its own OAuth 2.1 authorization server and an MCP client that connects customers' own tools to the agent
- Developed the channel and business integrations as a separate service, including **WhatsApp Business** as a verified Meta Tech Provider, Slack, email, Shopify and HubSpot
- Provisioned the AWS infrastructure as code with **Terraform** and built the delivery pipeline (GitHub Actions CI/CD, monitoring, alerting, backups), with background jobs running on **ArdiQ**, a self-built Rust-core task queue
- Ran regular security audits and hardening across the platform, covering multi-tenant isolation, access control and auditing, container hardening, data scrubbing in observability and incident response

Python · FastAPI · MongoDB (Atlas Vector Search) · PostgreSQL · Redis · ArdiQ · Claude (Anthropic API, Amazon Bedrock) · MCP · AWS (ECS Fargate, ALB, CloudFront, ElastiCache, Route 53, Secrets Manager, CloudWatch) · Terraform · Docker · GitHub Actions · Sentry

Full Stack Developer Intern

September 2025 – April 2026

MooDest · Mataró

B2B SaaS AI platform for HR: intelligent helpdesk with conversational agent and people analytics.

- Developed a FastAPI REST API integrating with a time-tracking platform of **300,000+ users**, covering authentication, role management, KPIs and security
- Built **4 integrations** with external channels for the conversational agent, including Slack and Microsoft Teams, from protocol design to deployment
- Led development of the people analytics dashboard (Angular, TypeScript, NestJS), from complex user flows to end-to-end business logic
- Containerized services with Docker Compose, configured Nginx in production and managed deployments on a self-hosted server
- Collaborated in a Scrum/Kanban team, reviewing code and managing pull requests

TypeScript · Angular · NestJS · Python · FastAPI · MongoDB · Redis · Docker · Nginx

Projects

- **ArdiQ** (Rust / Python / PyO3 / Tokio) [active]
Python task queue with a Rust core. ARQ-compatible API, async runtime built on Tokio, native bindings via PyO3/maturin. Published on PyPI as ardiq and running all background jobs in production at Intake. [github](#) →

- **Zona 14** (Python / NumPy / SciPy / Next.js) [active]
AI-powered pre-match football analytics. Built a Dixon-Coles bivariate Poisson goal model, fit per league from football APIs (time-decay form weighting, shrinkage priors, xG targets and closing-odds signals; L-BFGS-B with analytic gradients) and backtested against sharp-bookmaker baselines via closing line value. Its score grid drives betting markets flagged for value, with a grounded LLM layer explaining each pick in plain language. [zona14.app](#) →
- **Fluxo** (FastAPI / React / PostgreSQL / Redis) [active]
Decentralized crypto payment platform à la Stripe with multi-chain support (Ethereum, Solana, Polygon) and two custody models for merchants. [github](#) →
- **Agent skills & model benchmarks** (Python)
Author of production agent skills (FastAPI, Beanie/MongoDB, async testing) published on the Agensi marketplace, each validated with blind evals against the base model. Public benchmarks on model behaviour, including thinking vs tool-calling reliability in Claude Haiku 5.5. [github](#) →

Skills

Languages	Python, TypeScript/JavaScript, Rust, Bash, SQL
Backend	FastAPI, NestJS, Django, ArdiQ, ARQ, Celery, aiohttp, asyncio
Frontend	Angular, React, Vite, TanStack Query, shadcn/ui
Databases	MongoDB Atlas (Vector Search), PostgreSQL, Redis (cache, pub/sub, rate limiting, queues)
Cloud & DevOps	AWS (ECS Fargate, ECR, ALB, S3, CloudFront, ElastiCache, Route 53, Secrets Manager, SageMaker) Terraform, Docker, Docker Compose, GitHub Actions, Nginx, Linux
AI / ML	RAG pipelines, LLM evaluation, MCP, Anthropic API, Amazon Bedrock, Ollama, Hugging Face, SSE streaming
Agentic dev	Claude Code (custom skills & hooks, subagent orchestration), eval-driven AI-assisted development
Security	Pentesting, C2, reverse shells, AV evasion, OSINT, Hack The Box (25+ machines)
Protocols	REST, WebSockets, SSE, Pub/Sub, JWT, OAuth2, MCP
Tools	Git, Telethon, aiogram, structlog, SQLAlchemy, Sentry, pnpm, uv

Education

Higher Vocational Diploma in Multiplatform Application Development (DAM) Prometeo FP by thePower — Online, Official Spanish Vocational Education (Grado Superior)	Expected 2028
Cybersecurity Master's Prometeo FP by thePower — Online	Expected 2028
Project-driven self-taught learning Most of the stack learned independently through official documentation, books and real projects built from scratch and run in production. Every technology on this CV has been used in a real context, not just in tutorials.	2022 – Present
Intermediate Vocational Diploma in Computer Systems and Networks (SMR) Escola Pia Santa Anna, Mataró — Spanish Vocational Education (Grado Medio)	2026
Web Development and Programming Diploma Frontend (HTML, CSS, JS, React, NextJS) and backend (Python: Django, Flask, FastAPI)	2026

Languages

Spanish/Catalan — Native · English — Professional working proficiency

Additional Training

- **Hack4u (Cybersecurity Academy)**: Offensive Python, Introduction to Hacking, Introduction to Linux (2024)