

Santiago Varacca

AI Product Engineer | Full-stack

Buenos Aires, Argentina | santiagoovaracca@gmail.com | santiagoovaracca.dev | linkedin.com/in/santiagoovaracca
github.com/santiv343

Profile

AI Product Engineer with nearly five years of professional full-stack experience as my foundation. I connect product requirements, interfaces, backend services, data, and integrations to build useful applications. My independent AI work spans LLM applications and agents, model fine-tuning and evaluation, local inference, embeddings, and retrieval experiments. I work across requirements, experiment design, agent-assisted development, review, and validation.

Experience

Software Engineer, Urbano Express | Buenos Aires, Argentina | Feb 2026 - present

- Developed **React** and **TypeScript** interfaces using Ionic, Material UI (MUI), and Redux; integrated REST APIs and WebSocket-based features.
- Built and maintained **Node.js/NestJS** services with TypeORM and **PostgreSQL**, including schema changes, database migrations, and ERP integrations.
- Implemented the credit/debit-note module, covering creation, search, approval states, accounting-allocation reports, and audit views; added tests and functional flow documentation.
- Developed and QA-tested Postal Plus bulk billing in SUGU, including CSV validation against Tango ERP, grouped previews, asynchronous processing, per-item state, content-hash deduplication, and run reconciliation.
- Diagnosed and fixed a persistent TypeORM state-update bug across **NestJS** services; handled four-decimal precision, concurrent updates, idempotency, and duplicate prevention in billing workflows.
- Implemented scheduled processes and asynchronous/batch workers; worked with AWS-related authentication and queue-based workflows.

Software Engineer, FK Tech Solutions Factory | Remote | Sept 2023 - Jan 2026

- Developed frontend and backend features across most modules of Wellio, a B2B team-management platform for Latin American SMEs covering people, roles, organizational structure, leave, assets, onboarding, and performance.
- Contributed to Oh! Gift Card purchasing, personalization, and digital-delivery flows across frontend and backend.
- Worked on the internal ordering and control system for Farmacias Central Oeste (FCO).
- Built and consumed REST and gRPC APIs with Protocol Buffers, **PostgreSQL**, and MongoDB in a pnpm monorepo with shared libraries.
- Worked on **React/TypeScript** microfrontends using Webpack Module Federation and Material UI, with Preact Signals and custom hooks for state management.
- Contributed to **Node.js/NestJS** backend services and shared pnpm libraries; participated in code review, refactoring, and codebase standardization.
- Used MCP (Model Context Protocol) in AI-assisted development workflows.

Frontend Developer, SwagCharm LLC | Remote, United States | Jan 2023 - Sept 2023

- Developed **React** and **TypeScript** product features for a US team.
- Collaborated remotely with backend engineers on REST API integration.

Frontend Developer, 42i | Remote | Nov 2021 - Jan 2023

- Built **React** and Redux interfaces, integrated backend APIs, and maintained styling with CSS Modules and Sass.
- Built a Next.js landing page for 42i.

Applied AI — Independent Projects

Finance Copilot | AI-powered personal finance app | 2026

- Directed development of an independent local MVP with LangGraph-orchestrated document interpretation, human review before posting, source-linked reports, and duplicate-safe, idempotent processing.

Private project. **React**, **TypeScript**, FastAPI (Python), LangGraph, SQLite

AI applications, agents, and model experiments | 2026

- Directed fine-tuning and evaluation of cross-encoders for rule-code classification.
- Prepared and validated synthetic datasets with hard negatives, deduplication, and leakage-aware evaluation splits.
- Developed experimental integrations for local models, ONNX inference, embeddings, and retrieval.
- Built LLM application and agent workflows with typed tools and streaming.

Practical tools | 2026

- Worklogger ([release](#)) for Jira/Bitbucket and Outlook Local MCP ([release](#)) for classic Outlook; used by me and some coworkers.

Across the independent work above, I defined requirements and experiment goals, reviewed results, and validated workflows; coding agents implemented the code and tests.

Skills

Frontend: **React**, Next.js, **TypeScript**, JavaScript, Ionic

UI and state: Material UI (MUI), Redux, Preact Signals, **React** Router, **React** Hook Form, HTML, CSS Modules, Sass, Emotion

Backend and data: **Node.js**, **NestJS**, SQL, **PostgreSQL**, SQL Server, MongoDB, TypeORM

Architecture and APIs: Microfrontends, Webpack Module Federation, microservices, REST, gRPC, Protocol Buffers, WebSockets, monorepos

Engineering quality: Jest, testing, debugging, code review, refactoring, shared libraries, ESLint, Prettier

Delivery: Git, GitLab, pnpm, Docker, GitLab CI/CD, AWS integrations, Agile/Scrum

AI applications and agents: LLM applications, agent workflows, LangGraph, MCP, typed tools, streaming, n8n

Models and evaluation: Fine-tuning, cross-encoders, synthetic datasets, evaluation, local models, ONNX, embeddings, retrieval

Independent project stack: Python, FastAPI, SQLite, Rust, Dioxus, Windows COM

Languages: Spanish (native), English (C1 Advanced, EF SET 69/100)

Education

Universidad Nacional de La Plata | La Plata, Argentina | Dec 2018 - present

Computer Engineering | Coursework in progress