

OSCAR DANIEL NAVARRO CIEZA

Full-Stack Software Engineer | React · Next.js · TypeScript | AI-Augmented Development

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PROFESSIONAL SUMMARY

Full-Stack Software Engineer with 4+ years shipping production web applications, specialized in frontend and seeking it as the primary responsibility: React, Next.js and TypeScript, turning loosely defined requirements into polished, production-quality interfaces. Full-stack across backend, databases and deployment when a small team needs it. Recent focus on AI-augmented development: LLM integrations, RAG and Model Context Protocol (MCP) tooling, and self-hosted systems running unattended in production. Looking for early-stage teams building something unconventional: AI-driven consumer apps, dating and matchmaking platforms, or crypto and trading systems. Computer Engineering degree (PUCP). Based in Peru, UTC-5, with full working-hours overlap with North American teams.

TECHNICAL SKILLS

- **Frontend:** React, Next.js, TypeScript, JavaScript, Angular, TailwindCSS, CSS/SASS, Material-UI, Bootstrap, component architecture, state management, responsive design, Progressive Web Apps (PWA)
- **Mobile:** React Native (Expo), Android (Java/Kotlin)
- **AI & Automation:** LLM API integration (Anthropic Claude, Google Gemini, DeepSeek), Model Context Protocol (MCP) servers and clients, RAG, vector search (pgvector), embeddings (ONNX), AI-assisted UI prototyping (Stitch), Azure AI
- **Backend:** Node.js, Python (FastAPI), .NET Framework, C#, Java, REST APIs, Microservices
- **Cloud & DevOps:** AWS (EC2, S3, RDS), Oracle Cloud, Cloudflare, Docker/Podman, Nginx, CI/CD (GitHub Actions, GitLab), Linux VM administration
- **Databases:** PostgreSQL (pgvector), SQL Server, MySQL, MongoDB, Oracle, SQLite, Firebase, Supabase
- **APIs & Tools:** Git, Stripe, Firebase Auth/Realtime, Google APIs, Argos, Binance (ccxt), Alpaca, Finnhub, SEC EDGAR, Twilio
- **Domains:** AI-driven consumer products, dating and matchmaking platforms, cryptocurrency markets and exchange APIs, fintech and algorithmic trading systems, edtech

WORK EXPERIENCE

Frontend Engineer — PAIRUS INC. (Remote, Canada)

July 2025 - January 2026

- Led frontend development in Next.js, React and TypeScript for an AI-powered dating and matchmaking product: users complete an extensive personality questionnaire, the system generates a personality embedding, and each user receives a written profile summary plus a ranked list of their highest-compatibility matches.
- Built the questionnaire and results interfaces end to end and integrated the AI services that produce the embeddings and compatibility scoring.
- Designed and implemented real-time monitoring dashboards and log-visualization interfaces, giving the team direct visibility into system behavior.
- Built and optimized Stripe payment interfaces, focused on secure transaction handling and checkout conversion.

Software Engineer (Contract) — BELSITEC

June 2023 - Present

- Led full-stack development of admission and student portals for Continental University across three markets: Peru, Florida and Mexico.
- Built the complete web platform for a private school: administrative and student portals covering frontend, backend, automated email delivery and deployment.
- Developed the companion mobile application for that school, recording classroom attendance by scanning student QR codes and feeding dashboards and reports for attendance and grades.
- Implemented microservices, stored procedures and third-party integrations, including payment gateway integrations and reporting services built with Argos and SQL.
- Manage containerized deployment with Docker behind Nginx, and continue delivering frontend implementations for new portals and projects.

Frontend & Full-Stack Developer — Independent

2023 - Present

- Architected and shipped a restaurant reservation Progressive Web App (PWA) for iOS and Android, with an administrative portal for content and user management.
- Built a fully self-manageable website for a construction-supplies business: Next.js frontend deployed on Cloudflare, Firebase backend with file upload, and an admin panel letting the owner edit any text or image on the site without developer involvement.
- Delivered high-fidelity landing pages with complex animations and self-manageable CMS platforms for multiple clients.

Technology Consultant (Intern) — IBM Peru

April 2022 - March 2023

- Consulted on web and mobile application development for corporate clients, administered IBM Cloud services, and provided technical support, maintenance and error control for mission-critical corporate applications.

EDUCATION & LANGUAGES

Pontificia Universidad Católica del Perú (PUCP) - Lima, Peru

Bachelor's Degree in Computer Engineering

- **Languages:** Spanish (native). English - intermediate (B1); comfortable reading and writing technical English, conversational fluency improving.

PERSONAL PROJECTS

Self-directed work, self-hosted and running unattended on an Oracle Cloud VM.

Live: tickerlens.oscarnavarro.dev · study.oscarnavarro.dev · tvbot.oscarnavarro.dev

TickerLens — AI equity research platform • Next.js, TypeScript, FastAPI, PostgreSQL/pgvector

- Full-stack RAG application: enter a ticker and receive a cited bull/bear analysis with every claim linked to its source, plus a two-ticker comparison mode.
- Built the React frontend with LLM output streamed over Server-Sent Events; retrieval runs over the application's own computed financial data rather than scraped text.
- Deployed with multi-stage Docker builds behind Nginx, per-IP rate limiting and GitHub Actions CI.

Estudia — AI study companion • Python, FastAPI, SQLite, PWA and Android

- Multi-user product: photograph handwritten class notes and receive a study summary plus an auto-graded multiple-choice exam. Installable as a Progressive Web App and as an Android application.
- Built a three-stage LLM pipeline (vision transcription, summary, question generation) with context-window-aware chunking, so long documents are covered in full rather than sampled.
- Audited the application against an insecure-defaults methodology and closed all ten findings with regression tests, among them stored XSS from AI-generated content, cross-tenant access to other users' documents, and unbounded upload cost. Covered by 168 tests; runs as an unprivileged container.

Kepler — market-neutral quantitative trading system • Python, FastAPI, SQLite

- Multi-sleeve system with leverage sized to a maximum-drawdown budget; ran on live capital for 18 days with zero production incidents and drawdown held to 3.4% against a 10% budget.
- Archived after concluding the business model was unviable at the available capital scale, a decision taken on the system's own logged evidence rather than on technical failure.

tvindicators — algorithmic trading research platform • Python, ccxt, FastAPI, systemd

- Operate a platform running around forty validated technical strategies against Binance perpetual futures, executing and logging every decision continuously; it has run unattended since deployment, restart-safe with positions persisted and a drawdown circuit breaker.
- Applied multiple-testing correction to the backtest results and used it as a gate to keep strategies out of production rather than to justify them, together with slippage and cost modelling that cut the headline Sharpe from 1.94 to a defensible 1.67.
- Exposed a REST API for status, equity curves, per-strategy summaries and live-versus-backtest evaluation, and enforce it with a pre-push hook that blocks any commit where the live signal path stops reproducing the backtest.

Additional projects

- **Local-first weight tracker** - React 19, TypeScript, Vite, Capacitor, SQLite compiled to WebAssembly. All data stays on the device: no server, no account. BMI calendar and hand-written SVG charts, shipped as a PWA and an Android app with CI building both. Covered by 30 tests.

- **OSINT exposure dashboard** - FastAPI, Next.js, TypeScript, Playwright, Docker. Given a username, email or national ID, reports what is publicly associated with it, with a confidence score and stated reasoning. Thirteen collectors in parallel with isolated failure handling and identity correlation across accounts. Covered by 234 tests.
- **Market-catalyst alerting service** - Python, FastAPI, SQLite, Twilio. Ingests news, regulatory filings and social feeds, scores each catalyst with Google Gemini and the Anthropic Claude API, and delivers SMS alerts. A separate event-study loop measures the abnormal price reaction to every alert and feeds it back to calibrate future scoring, which is how one whole signal arm was measured, found unprofitable after fees, and retired.
- **Desktop video editor** - Python, PySide6, libmpv, FFmpeg with NVENC. Built for trimming and exporting 10-20 GB recordings without full-file reads: custom timeline widget, packet-accurate cutting, and a smart-render planner that stream-copies where possible and falls back to hardware-accelerated re-encoding. Covered by 96 tests.