

Pedro Henrique França

Full Stack Developer

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Professional Summary

Full-stack developer with experience building and evolving production web and mobile applications. I work primarily with TypeScript, NestJS, React, React Native, Flutter, and PHP, contributing across backend, frontend, mobile, architecture, and legacy systems. Currently part of an educational technology ecosystem serving tens of thousands of monthly active users, with experience in authentication, payments, integrations, and shared platform architecture.

Technical Skills

Languages: TypeScript, JavaScript (ES6+), PHP, Dart, SQL, Rust

Backend & Data: NestJS, Prisma, TypeORM, MySQL, CodeIgniter 3, Laravel 10 + Livewire, REST APIs, WebSocket (Socket.IO)

Frontend: React, Vite, MUI, Radix UI, TanStack Query, React Hook Form + Zod, SCSS, hls.js

Mobile: React Native (Expo), Flutter, Apple StoreKit 2, Firebase, Drift/SQLite, offline-first architecture, App Store Connect, Google Play Console

Cloud & Infrastructure: AWS (Cognito, S3, SES, SQS, CloudWatch), Clerk, Docker, GitHub Actions, Datadog

Testing & Quality: Jest, Supertest, Cypress, React Testing Library, PHPUnit, flutter test, Artillery, code review

Experience

Full Stack Developer

August 2024 – Present

TopInvest - PRIMO Group | Caxias do Sul, RS

- Develop and evolve production web and mobile applications using NestJS, React, React Native, Flutter, and PHP, working across backend, frontend, mobile, and integrations.
- Built the Cursos TopInvest mobile app from proof of concept to release on the App Store and Google Play. Implemented offline video with encrypted storage, push notifications, crash monitoring, and forced updates, and resolved production video crashes through a planned SDK migration.
- Researched and proposed the multi-tenancy architecture adopted in the LMS, implementing tenant isolation in the NestJS backend and hostname-based theming in React. The solution enabled a second white-label brand to operate on the same stack.
- Acted as a main contributor to the ecosystem's identity migration from AWS Cognito to an in-house SSO, integrating applications across TypeScript, PHP, Flutter, and React Native and implementing duplicate-account handling and real-time session invalidation.
- Designed and built a TypeScript SDK that unified the exam-solving engine across React, React Native, Flutter, and a legacy CodeIgniter application, centralizing state management, tree-based navigation, scoring, and platform-specific integrations.
- Took over the evolution of a legacy CodeIgniter 3 application, developing a tree-based question engine, cross-device progress recovery, B2B financial reports, and CRM integrations.
- Implemented payment and subscription integrations across mobile applications and backend services, including Apple StoreKit 2, PIX, boleto, QR code payments, transaction validation, and offline caching.
- Developed an HP-12C financial calculator emulator in JavaScript, reproducing RPN and TVM calculations for an embeddable web application and Electron desktop build. Its lead-capture flow receives approximately 500 monthly users with an ~8% conversion rate.

Full Stack Intern

August 2023 – March 2024

FCODE | Caxias do Sul, RS

- Developed 6+ complete CRUD applications with CodeIgniter, jQuery, and MySQL, working from requirements gathering through production deployment.
- Modeled relational databases with 20 to 40 tables and built responsive interfaces with jQuery and Bootstrap.

Personal Projects

Cleanser — macOS storage cleanup tool

Rust, Rayon, SHA-256, Homebrew, CI/CD

Storage cleanup tool for macOS with GUI and TUI interfaces built on a shared Rust core. Designed the initial architecture and implemented dynamic file discovery, caching, risk classification, and duplicate detection using parallel SHA-256 hashing. Published as a Homebrew package with a CI/CD pipeline.

[cleanser-claws.app](#)

Cymatic — Real-time audiovisual synthesizer

TypeScript, Web Audio API, WebGL2, GLSL, Vite

A real-time audiovisual synthesis system inspired by cymatics. Designed the application architecture and implemented configurable harmonic audio layers, radial interference rendering with WebGL, and synchronized audio-visual output through a shared AudioContext.

[Live Demo](#)

Education

Bachelor's Degree in Software Engineering

March 2023 – August 2028 (in progress)

University of Caxias do Sul | Caxias do Sul, RS

Languages

Portuguese: Native

English: Fluent (technical documentation and written / spoken communication)