



# Filipe Amaral

Senior Full-Stack Software Engineer

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Portuguese, English

## BACKGROUND

### ABOUT

Full-Stack Engineer with nearly a decade of experience building SaaS platforms in healthcare, fintech, and insurance. I deliver end-to-end product features—from GraphQL APIs and compliance-driven systems to modern React frontends and high-performance data pipelines. I've built care plan modules, prior authorization workflows, real-time pricing engines with multi-vendor integrations, and wealth management platforms. I focus on scalable architecture, regulatory compliance, and shipping reliable systems.

### WORK EXPERIENCE

#### Senior Software Engineer, Advis

Nov, 2025 - Present

Building a full-stack wealth management platform

- Building a full-stack wealth management platform using NestJS, Next.js, and TypeScript in a Turborepo monorepo
- Architected type-safe API client infrastructure with OpenAPI auto-generation and TanStack Query integration
- Established CI/CD pipeline with GitHub Actions, unified linting configs, and developer tooling across the monorepo
- Integrated with financial data providers (BlackDiamond, Wealthbox, Dottie) for portfolio and client management

## Senior Software Engineer, Surton / RxPartner

Aug, 2024 - Mar, 2025 7 months

Built pharmaceutical pricing platform with multi-vendor integrations

- Built FastAPI backend for pharmaceutical pricing platform, integrating multiple claims processor vendors (Optum, RxLogic, Cervey, MedOne, Buzz) for real-time drug price comparison
- Implemented DynamoDB caching layer with client-specific API key caching and TTL-based invalidation for high-throughput price lookups
- Built transaction tracking system with detailed logging for pricing accuracy analytics and vendor performance monitoring
- Managed AWS infrastructure (Terraform) including EventBridge triggers, SQS queues, and multi-vendor credential management

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## Senior Software Engineer II, DrChrono

Aug, 2021 - Present

Led healthcare interoperability and compliance initiatives for EHR platform

- Led ONC HTI-1 and USCDI v3 certification compliance, implementing provenance tracking and persistent ID versioning for 15+ clinical resource types
- Built Care Plan module end-to-end: designed GraphQL schema, implemented React frontend with drawers/modals, integrated care team management with audit logging
- Developed SMART on FHIR integration platform with management dashboard, JWT authentication, and patient data access for third-party healthcare applications
- Implemented annual MIPS/eCQM quality measure updates (2022-2025) and QRDA exports for Cypress certification validation
- Optimized bulk C-CDA export system—resolved race conditions, added performance improvements, and implemented upper limits for large healthcare practices
- Built asynchronous C-CDA export API and contributed to React Calendar rebuild migrating from Angular

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## Senior Software Engineer, Tomorrow Health

Dec, 2023 - Jun, 2024 6 months

Built prior authorization system for home health equipment ordering platform

- Built Prior Authorization Request system end-to-end: GraphQL backend (Python/Django) and React frontend with tables, drawers, and timeline components
- Implemented PA cover sheet generation mutation, Title XIX (Medicaid) form integration, and fax submission workflow
- Extended insurer data model with state-specific prior authorization configurations

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## Back End Engineer, Rise Financial

Jul, 2022 - Nov, 2022 4 months

Achieved PCI compliance for financial services platform

- Restructured backend architecture in Django and integrated with Very Good Security to secure credit card data
- Achieved PCI compliance and enhanced system scalability

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## Senior Software Engineer, BriteCore

Dec, 2017 - Jun, 2021 3 years 6 months

Modernized insurance platform serving 50+ insurance companies

- Replaced legacy insurance system with modular components using Python, Django, Flask, and VueJS on AWS
- Developed serverless authentication service for 50+ insurance companies using AWS Lambda and Cognito
- Supported clients by proposing features, resolving bugs, and improving system reliability

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## Frontend Developer, localhost.company

Jun, 2016 - Jun, 2017      1 year

Frontend development for client applications

- Maintained and supported applications built in Angular 1.5 and AngularJS
- Ensured stability and functionality for ongoing client projects

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## PROJECTS EXPERIENCE

### keyboard-sounds

- Present

Mechanical keyboard sounds extension for VSCode with 17+ stars

- Built a VSCode extension that plays mechanical keyboard sounds while typing
- Published on VSCode Marketplace with community adoption

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### ccdakit

- Present

Python library for generating HL7 C-CDA clinical documents

- Open-source library for programmatic generation of C-CDA documents
- Supports healthcare interoperability standards (HL7, CDA)

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### NinjaTraderIndicators

- Present

Collection of custom trading indicators for NinjaTrader 8 with 7+ stars

- Custom technical analysis indicators for algorithmic trading
- Used in personal trading system

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## SKILLS

### Backend Development

Python Django FastAPI NestJS Flask Celery GraphQL REST

### Frontend Development

TypeScript JavaScript React Next.js Vue.js AngularJS

### Databases

PostgreSQL MySQL DynamoDB SQL

### Cloud & Infrastructure

AWS Lambda SQS EventBridge Cognito Terraform Docker

Healthcare Standards

- HL7 FHIR
- C-CDA
- QRDA
- eCQM
- USCDI
- ONC Certification
- MIPS

Architecture & Practices

- Microservices
- Monorepos
- CI/CD
- PCI Compliance
- Scalable Systems

EDUCATION

**Computer Science, Bachelor of Science**, Universidade Federal de São João del-Rei  
Jan, 2011 - Dec, 2016

CERTIFICATES

**AWS Certified Developer**, Amazon Web Services  
Issued on: Dec 01, 2019

