

Belal Embaby

SOFTWARE ENGINEER | JAVA / SPRING BOOT | FULL-STACK DEVELOPMENT

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Open to NYC/NJ or remote roles and relocation • U.S. work authorized; no sponsorship needed

Software engineer building Java/Spring Boot APIs and Next.js/TypeScript apps. Shipped FitTrack+ on iOS and contributed 44 merged open-source PRs, including 8 in Hugging Face's sentence-transformers.

TECHNICAL SKILLS

Languages: Java, TypeScript, JavaScript, Python, SQL, Swift

Backend & Data: Spring Boot, REST APIs, MySQL, PostgreSQL, Drizzle ORM

Web & Mobile: React, Next.js, SwiftUI

Tools & Testing: Git, Docker, pytest, Playwright, CI/CD, Railway, Vercel

EXPERIENCE

Open Source Contributor

Sep 2026 – Present

- Fixed sentence-transformers search index collisions with UUID suffixes to prevent existing indexes from being deleted; tested with a frozen clock against in-memory Qdrant.
- Fixed an OpenMed cache race by treating entries deleted before a read as cache misses; verified with 8 deterministic tests.
- Reduced OpenMed list-boundary detection from quadratic to linear work using a monotonic stack; 12 regression tests and the full 21,548-test suite passed.

RANCS Capital

Sep 2025 – Dec 2025

React, JavaScript, HTML, CSS

- Contributed React CRM features to organize leads and follow-up for a small real-estate company.

SELECTED PROJECTS

FitTrack+ - iOS and Apple Watch Fitness App

App Store

Swift, SwiftUI, watchOS, HealthKit, WatchConnectivity, Java, Spring Boot, MySQL, Docker, Railway

- Shipped a SwiftUI iOS and Apple Watch fitness app using HealthKit and WatchConnectivity for workout sync, reaching 2,000+ App Store downloads and 200+ active users.
- Built a Java/Spring Boot REST API with MySQL and JWT/OAuth authentication for workout and nutrition logging; deployed with Docker on Railway.

emBabySteps - embabysteps.com

Oct 2026

Next.js, TypeScript, PostgreSQL, Drizzle ORM, Better Auth, Tiptap, Playwright, Vercel

- Built a Next.js/TypeScript publishing platform for a licensed pediatric physical therapist; live in pre-launch with a 21-table PostgreSQL schema using Drizzle ORM.
- Required staff TOTP through Better Auth and used database-backed sessions so revoked sessions lose access on the next request.
- Built a Tiptap editor with 6 post templates and revision history; automated scheduled publishing with Vercel cron every 5 minutes.
- Added 21 Playwright browser test scripts and CI checks; production Lighthouse scored 93–95 performance and 100 for accessibility and best practices.

Park West Diner - parkwestdiner.com

2026

Next.js, TypeScript

- Converted a 349-dish printed menu into a searchable Next.js/TypeScript website on the diner's domain; unit-tested open/closed hours across daylight-saving changes.

EDUCATION

New Jersey Institute of Technology - B.S. Computer Science

Dec 2025

Newark, NJ • Dean's List (4 semesters)

LANGUAGES

Arabic, English, Spanish