# VIJAY KHOT

vijay@vijaykhot.com · Jersey City, NJ · linkedin.com/in/vijay-khot · github.com/vijaybkhot · vijaykhot-dev.vercel.app

# SUMMARY

Computer Science grad with 6 years of project engineering experience and proficiency in backend-focused, full-stack development. Proven ability to build, test, and deploy production-ready applications using Node.js, Python, and AWS. Demonstrated elite problem-solving skills, solving 600+ LeetCode problems (top 0.5% of global users). Seeking to apply 6 years of project engineering experience to building and supporting critical information systems.

## SKILLS

- Languages & Databases: Python, JavaScript, TypeScript, Java, SQL, MongoDB, PostgreSQL
- Frameworks & Libraries: Node.js, Express, React, Next.js, GraphQL (Apollo), Stripe API, NumPy, Pandas
- Developer Tools & Infra: AWS (EC2, S3), Docker, Git, CI/CD (GitHub Actions), Redis, Vercel, Render, Jest, Postman
- Concepts: Object-Oriented Design (OOD), REST APIs, MVC Architecture, System Design, Unit & Integration Testing

## **PROJECTS**

# NexTune – Music Metadata & Discovery Platform

Sep 2024 – Present

Tech: Next.js, TypeScript, GraphQL, Apollo Client, Redis, MongoDB, Docker, AWS EC2, Nginx

- Engineered a full-stack application with a modular GraphQL backend, optimizing database queries and implementing Redis caching to support real-time search and filtering across artists, albums, and songs.
- Built a server-side rendering (SSR) architecture with Apollo Client cache hydration, reducing Largest Contentful Paint (LCP) by 40% (2.5s → 1.5s) while enhancing SEO and initial load performance.
- · Containerized the application using Docker and deployed on AWS EC2 with an Nginx reverse proxy.
- Links: GitHub · Live Demo

# eVoltzo - EV Station Booking Platform

Jan 2024 - May 2024

Tech: React, Node.is, Express, MongoDB, Stripe API, Docker, AWS S3, Firebase Auth

- Led backend architecture in a 5-person team; designed and implemented a conflict-aware booking engine, role-based access control (RBAC), and a dynamic pricing module to support 25+ concurrent users.
- Engineered a full Stripe Checkout integration with webhook-driven booking updates, supporting saved payment methods and session-based billing with 100% reliability in testing.
- Links: GitHub · Video Demo

#### **EXPERIENCE**

## **Graduate Student Tutor**

Oct 2023 - May 2025

Stevens Institute of Technology - Hoboken, NJ

- Provided technical guidance to 7+ graduate students, troubleshooting complex issues in algorithms, API design, and asynchronous programming.
- · Mentored students on best practices for software design, debugging, and testing strategies for academic projects.

#### **Project Engineer**

May 2017 - Jun 2023

Ichalkaranji Municipal Corporation - Ichalkaranji, India

- Utilized a PMIS to manage lifecycles, track budgets, and report on progress for 6 large-scale housing projects impacting over 600 beneficiaries.
- Developed Python scripts using Pandas and NumPy to automate the analysis and reporting of project funds, reducing data collation time by over 50% compared to previous manual methods using Excel.

## **EDUCATION**

# Stevens Institute of Technology

May 2025

Hoboken, NJ

Master of Science in Computer Science - GPA: 3.97/4.00

- Honors: Provost's Merit Scholarship (\$14,000)
- Relevant Coursework: Project Management Fundamentals, Algorithms, Database Mgmt. Systems, Web Programming

## College of Engineering, Pune

May 2015

Pune, India

Master of Technology in Construction & Management

• Relevant Coursework: Construction Project Planning Management, Project Economics & Finance, Construction Cost Dynamics