

JEEVAKRISHNA VETRIVEL

Thanjavur, Tamil Nadu, India

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PROFESSIONAL SUMMARY

Software engineer with experience building and shipping production-grade, customer-facing applications end-to-end. Proficient in **Python, TypeScript/JavaScript** across modern frontend (**React, Next.js**) and backend (**Node.js**) systems. Strong foundation in **testing methodologies, API and automation testing, CI/CD pipelines**, and systematic **edge-case analysis**. Experienced integrating **AI/LLM tools** into reliable products with a **quality-first, performance-driven** mindset.

EXPERIENCE

•Frontend Developer Intern

TRYMBKM (Stealth Mode Startup)

Remote

Oct 2024 – Jan 2025

- Implemented production-grade **React + TypeScript** components and refactored legacy code, reducing UI-related issues by **20%**.
- Introduced reusable UI primitives (forms, layouts) and optimised render paths, improving bundle size and perceived load time.
- Improved frontend error handling and edge-case management for increased application stability.
- Collaborated with founders to review pull requests, evaluate technical trade-offs, and document frontend architecture decisions.

•Video Game Developer & Founder

VoltaVerse Studio

Remote

Mar 2024 – Present

- Designed and implemented game UI using **React and TypeScript**, optimising animation and render loops to sustain **60fps** on mid-range devices.
- Built **AR/VR experiences** for neurodivergent learners, iterating on interaction patterns based on user and educator feedback.
- Launched Instagram and Snapchat AR effects with **40K+ plays**, using analytics to guide updates and performance optimization.
- Managed end-to-end product development including UI, logic, performance tuning, and deployment across multiple platforms.

•Full-Stack Developer

Freelance

Remote

Apr 2022 – Present

- Delivered full-stack applications using **React/TypeScript** frontends and **Node.js / Python** backends for multiple clients.
- Integrated third-party services (payments, analytics, authentication) with robust retry logic and defensive error handling.
- Designed RESTful APIs, database schemas, and CI/CD pipelines for production-ready systems; maintained **99.9% uptime** across deployments.
- Worked directly with clients to gather requirements, ship features quickly, and maintain long-term system reliability.

PROJECTS

PromptPDF — Production AI/LLM RAG System

Live | GitHub

- Full-stack RAG application: React/TypeScript frontend with real-time streaming, Python FastAPI backend, Pinecone vector database.
- Integrated **OpenAI LLM APIs** with production-grade error handling, achieving **95% query accuracy** and **91.9% uptime**.
- Implemented async request handling, Redis caching, and monitoring dashboards for performance optimization and reliability.
- Deployed to production (Vercel) with Docker containerization and GitHub Actions CI/CD pipelines.

FoodFocus — AI Food Recognition & Real-Time Tracking

GitHub

- End-to-end consumer app: React frontend, Node.js backend, PostgreSQL database, Vision Transformer (ViT) ML model integration.
- Built real-time food recognition using **image processing and AI inference**, integrated calorie tracking and user analytics.
- Designed responsive UI for mobile-first experience; implemented robust API design for ML model communication.
- Deployed to App Store and Play Store; optimized app performance for consumer-grade reliability.

Zuzu Programming Language — Compiler & Runtime

GitHub

- Full compiler pipeline: lexer, recursive descent parser, AST generation, runtime interpreter with error recovery.
- Demonstrated deep understanding of language design, tokenization, parsing, and runtime execution.

TECHNICAL SKILLS

Frontend: React, Next.js, React Native, TypeScript, HTML, CSS, Tailwind CSS, Redux, Zustand, React Query

Backend: Node.js, Express.js, Python, FastAPI, Flask, RESTful APIs, WebSockets, real-time features

Databases: PostgreSQL, MySQL, MongoDB, Redis, vector databases (Pinecone, Weaviate)

AI/ML Integration: LLM APIs (OpenAI, Anthropic), prompt engineering, agent workflows, ML model integration

DevOps & Infrastructure: Docker, containerization, GCP (Compute Engine, Cloud Run, Cloud Storage), AWS S3, CI/CD (GitHub Actions)

Languages: Python, JavaScript, TypeScript, SQL, C#

Tools & Practices: Git/GitHub, Supabase, DrizzleORM, Clerk, unit testing, code reviews, agile development

Mobile: App Store & Play Store deployment, mobile-first responsive design, performance optimization

EDUCATION

•Bachelor of Technology (B.Tech) in Information Technology

SASTRA Deemed University, Thanjavur, India

Expected Graduation: May 2026

Oct 2022 – Present