

Rushabh Rode

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LinkedIn | GitHub | Portfolio | IEEE Researcher

Professional Summary

Computer Engineering undergraduate (VIT Pune, CGPA: 8.69) with hands-on experience building LLM-powered applications, RAG pipelines, and backend systems. IEEE-published ML researcher (95% classification accuracy using ResNet18 + Random Forest) with practical exposure to generative AI, retrieval architectures, prompt engineering, and full-stack software engineering in Python, TypeScript, Java, and React.

Experience

Software Development Intern Aug 2025 – Nov 2025
Prime Global Workforce, Gurgaon

- Architected and deployed the company’s public-facing website using React.js and Next.js, reaching 500+ monthly visitors within weeks of launch.
- Reduced front-end development time by 30% by building a library of 15+ reusable, responsive UI components, enabling faster delivery of new pages across the project.
- Implemented Next.js SSR and dynamic routing to achieve sub-2-second page load times, directly improving search engine indexability and user retention.
- Collaborated with stakeholders to translate product goals into scalable web architecture, delivering all milestones on schedule.

Projects

Code Review Assistant TypeScript | Node.js | Express | Google Gemini API | Supabase

- Built an LLM-powered code review agent that analyzes pull requests and code snippets, using the Google Gemini API to generate structured, actionable feedback in JSON — an agentic developer-productivity tool.
- Designed the backend in Node.js/Express/TypeScript with request rate-limiting and Supabase for persistence, following clean REST API and service-layer design principles.
- Deployed as a live, publicly usable tool with end-to-end ownership from prompt design and API integration to backend deployment.

Two-Tower RAG Pipeline Python | Embeddings | Vector Search

- Implemented a two-tower neural retrieval architecture that independently encodes queries and documents into a shared embedding space for efficient semantic matching.
- Built the surrounding Retrieval-Augmented Generation (RAG) pipeline — embedding generation, vector similarity search, and context injection — to ground LLM responses in retrieved documents.
- Hands-on exposure to core building blocks for LLM applications: embeddings, vector databases, and retrieval orchestration.

Library Management System React.js | Java | Spring Boot | MongoDB | Docker

- Designed and documented 10+ REST APIs using Spring Boot and MongoDB, modelled around real business workflows including book search, availability check, borrow, return, and overdue alerts.
- Secured the platform end-to-end with JWT-based authentication and role-based access control, and containerized the entire stack with Docker for consistent local and production deployments.

Autism Detection via Eye Tracking Python | TensorFlow | ResNet18 | Random Forest

- Research published at IEEE OTCON-2025
- Built a two-stage ML pipeline — ResNet18 for deep feature extraction from eye-tracking frames, followed by Random Forest classification — to detect autism spectrum disorder from gaze patterns and fixation duration as behavioral biomarkers.
 - Achieved 95% classification accuracy across all test cases, rigorously validated using precision, recall, and F1-score to ensure clinical reliability of predictions.
 - Published findings at IEEE OTCON-2025, contributing a reproducible, non-invasive AI screening approach to the early autism diagnosis research community.

Skills

AI / LLM / GenAI	RAG pipelines, Two-Tower Retrieval, Prompt Engineering, LLM Orchestration, Google Gemini API, Embeddings, Vector Search, TensorFlow, PyTorch, Scikit-learn
Languages	Python, Java, JavaScript/TypeScript, SQL, C, C++
Backend & APIs	REST APIs, Node.js, Express.js, Spring Boot, Django, Microservices, JWT Auth
Databases	MongoDB, MySQL, PostgreSQL, Supabase, Vector Databases
Cloud & DevOps	AWS (EC2, S3), Docker, Git/GitHub

Education

Vishwakarma Institute of Technology, Pune 2022 – June 2026
B.Tech., Computer Engineering CGPA: 8.69
Relevant Coursework: DSA, DBMS, Operating Systems, Computer Networks, OOP, Machine Learning

Leadership & Extracurriculars

SWDC Secretary, VIT Pune — Led 200+ volunteers and 30+ coordinators across flagship social campaigns and campus events.

NCC Corporal — Completed national-level endurance camps demonstrating leadership and discipline under pressure.

Certifications

AWS Certified Solutions Architect	IBM Full Stack Developer Master Program
Microsoft Power BI (LinkedIn Learning)	Database Management Systems (NPTEL)