Rajat Bansal

📞 (+91) 8306595696 | ✉ rnkbansal123@gmail.com | in LinkedIn | ○ Github

EDUCATION

VIT Bhopal University   **8.6**/10   Bhopal, MP
B.Tech, CSE (Cloud Computing and Automation)   Expected Aug 2026

SKILLS

Languages: Java, SQL, HTML, CSS, JavaScript   **Frontend:** React.js, Next.js, TailwindCSS
Backend: Node.js, Express.js, RESTful APIs, Prisma   **Databases:** MongoDB, MySQL
Cloud: AWS (EC2, S3,RDS)   **Tools:** Git, GitHub

PROJECTS

SkillSync: AI-powered Partner Matching Platform *Next.js, MySQL, AWS*   June 2025

- Engineered an **AI matchmaking engine** that parsed and vectorized 20+ profiles from GitHub and resumes to quantify technical skills, successfully matching over 30 users.
- Orchestrated a fully containerized deployment on AWS EKS using Kubernetes, establishing a CI/CD pipeline to ensure high availability and automated, scalable growth.
- Implemented a dynamic feedback loop using a **Bayesian model** to refine user scores post-collaboration, creating an adaptive and fair matching ecosystem.

MockVerse: Mock Interview Platform *Next.js, FastAPI, PostgreSQL, Gemini AI API, AWS*   May 2025

- A full-stack AI platform designed for scalable, real-time interview simulations.
- Created a dynamic interview engine leveraging **Google's Gemini LLM** with advanced prompt engineering to generate context-aware, role-specific questions.
- Forged a **bidirectional audio stream** integrating the browser-native **Web Speech API** for real-time Speech-to-Text (STT) and a Text-to-Speech (TTS) module for a fully conversational experience.
- Crafted a **feedback generation service** that processes interview transcripts via an LLM to provide structured, actionable analytics, with session data persisted in a PostgreSQL database.

Carpool: Seamless Car-Sharing And Rental Solutions *HTML,CSS,JavaScript,Python*   October 2024

- Architected and developed a comprehensive ride-booking and rental platform, prioritizing a seamless user experience across all functionalities, from search to booking.
- Optimized backend functionality, enabling efficient deployment, ensuring high scalability, and improving system performance for anticipated user growth and engagement.
- Engineered an intuitive and responsive front-end interface, significantly enhancing user accessibility and engagement across various devices.

CO-CURRICULAR

- **Cloud Computing** - AWS Educate. Cloud Solution Design (IBM SkillsBuild).
- **Open Source Contributor** - Contributed in SSOC and GSSOC
- **Full-Stack- Development** with MERN - SmartBridge Certified
- **MongoDB Node.js Developer Path** -Backend and database skills with MongoDB and Node.js

EXTRA CURRICULAR

- **Co-Lead of Content Team, Mozilla Firefox Club:** Directed content creation and strategy for 10+ club initiatives, attracting 500+ unique users.
- **Tech Co-Lead, BashCraft Club:** Hosted 15+ technical workshops and events, empowering 200+ members to build coding expertise.
- **Member, NSS:** Participated in various community service projects, promoting social impact and teamwork.