# Aryan Tiwari

**Backend Software Engineer | AI Automation Developer | REST API Developer**

Jabalpur, Madhya Pradesh, India | +91-7389297343 | tiwariaryan668@gmail.com
GitHub | LinkedIn | Portfolio

## Professional Summary

Backend Software Engineer with hands-on experience building production-ready backend services, REST APIs, AI-powered applications, automation workflows, and PostgreSQL-backed systems using **JavaScript, Node.js, Express.js, and SQL**. Experienced in OpenAI integrations, AI agents, Voice AI, authentication, webhooks, third-party APIs, debugging, deployment, database optimization, and AI-assisted development using **ChatGPT, Claude Code, Cursor, GitHub Copilot, and Windsurf**.

## Technical Skills

**Programming:** JavaScript, SQL **Backend:** Node.js, Express.js, REST APIs, API Development, API Integration, Authentication, JWT, Webhooks
**Database:** PostgreSQL, SQL, Relational Databases, Database Design, Query Optimization
**Frontend:** React, Next.js, HTML, CSS
**AI:** OpenAI API, AI Agents, AI Automation, Generative AI, Prompt Engineering, Conversational AI, Voice AI
**Voice/Audio:** Dhee/IndicF5, Vocos, Hindi/Hinglish TTS, SoundFile, WAV Processing, Audio Processing
**Tools:** Git, GitHub, Postman, VS Code, ChatGPT, Claude Code, Cursor, GitHub Copilot, Windsurf, Blackbox AI

## Professional Experience

**Backend Software Engineer** **April 2026 – Present**
*MBG Card* *Jabalpur, India*

- Develop and maintain production backend services and **REST APIs** supporting AI-powered applications, automation workflows, and customer engagement systems.
- Build scalable backend modules using **JavaScript, Node.js, Express.js, and PostgreSQL**; develop SQL-driven data workflows.
- Integrate OpenAI APIs, telephony platforms, and third-party services; design webhook-based communication systems for AI voice agents.
- Implement authentication and JWT-based security; optimize PostgreSQL queries and backend performance.
- Debug, troubleshoot, deploy, and maintain production backend systems using Git/GitHub and AI-assisted development workflows.

## Selected Projects

**AI Voice Calling Platform** *Node.js, Express.js, PostgreSQL, OpenAI API, Exotel*

- Built a production-oriented AI Voice Calling Platform supporting conversational AI workflows and automated customer interactions.
- Developed backend APIs, database models, webhook integrations, voice automation, and PostgreSQL architecture.

**AI Chatbot Platform** *Node.js, Express.js, PostgreSQL, OpenAI API*

- Developed an AI chatbot backend with REST APIs, LLM-powered workflows, PostgreSQL data management, and authentication.

**Local Hindi/Hinglish TTS Engine** *Dhee/IndicF5, Vocos, Python, SoundFile*

- Built a local Hindi/Hinglish TTS pipeline using **Dhee/IndicF5 and Vocos**, optimized for Windows CPU inference.
- Resolved TorchCodec/libtorchcodec compatibility issues by replacing inference-path `torchaudio.load()` with a SoundFile-based WAV pipeline supporting float32 audio, stereo-to-mono conversion, and 24 kHz resampling.
- Integrated the local TTS pipeline into the AI voice-calling workflow.

**AI Workflow Automation Platform** *Node.js, Express.js, PostgreSQL, REST APIs*

- Developed backend workflows for customer engagement and AI-driven automation with API integrations, authentication, webhooks, and database-backed workflow states.

## Engineering Highlights

- Worked with **OpenAI APIs, Exotel, ElevenLabs, REST APIs, webhooks, PostgreSQL, and AI voice workflows** in production-oriented applications.
- Solved backend, database, API, audio-processing, and runtime compatibility issues through systematic debugging and troubleshooting.
- Use AI coding assistants for development, debugging, refactoring, documentation, and learning while validating architecture and code quality.

## Core Engineering Strengths

Problem Solving | Debugging | Backend Architecture | API Design | API Integration | Scalable Systems | Database Optimization | Production Support | AI-Assisted Development | Rapid Learning | Ownership