



Rushikesh Diliprao Bhomale

Backend Software Engineer | Python & Node.js

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📍 Bengaluru

🌐 LinkedIn

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🔗 Tech Portfolio

🔗 LeetCode

🏆 HackerRank

🎓 Professional Summary

Backend Software Engineer with 2 years of experience in designing and building scalable, production-grade backend systems using Python, Node.js, FastAPI, and GCP. Passionate about clean code, performance optimisation, and cross functional team collaboration.

🧠 Technical Skills & Tools

Programming Languages:

- Python
- JavaScript

Frameworks & Libraries:

- FastAPI
- Node.js
- Express.js
- Flask

Databases:

- PostgreSQL
- MongoDB

Cloud & DevOps:

- Google Cloud Platform (GCP)
- Git
- Docker

Tools & Technologies:

- Rest APIs
- Microservices
- Data Structures and Algorithms (DSA)

Soft Skills

- Adaptable & Quick Learner
- Effective Collaborator
- Technical Problem-Solving
- Code Review & Helping Others

🎓 Education

Full Stack Web Development,

Masai School ✍

Dec 2022 – Dec 2023

Bachelor of Engineering, Bapurao

Deshmukh College of Engineering ✍

Jul 2017 – Aug 2021

👛 Work Experience

NeuralHQ.ai, Software Engineer

Jan 2024 – Present ✍

Bengaluru, Karnataka

• AI Agent “Sean” (Fintech Customer Support) ✍

- ▶ Implemented a microservices-based AI Agent automating credit card-related query resolution. The agent utilised complex SOPs and transactional data to resolve card-related queries (e.g., bill inquiries, payments, and card blocking) and escalated complex cases.
- ▶ Developed authentication and identity management microservices, including PostgreSQL schema design, JWT-based REST APIs, and role-based access control, enabling secure access to financial data across services.
- ▶ Reduced average query resolution time by ~60%

• AI Sommelier Agent (Wine Discovery Assistant) ✍

- ▶ Built a conversational assistant that engages users to understand their wine preferences (varietal, taste, budget, food pairing, etc.) and recommends wines from inventory with purchase links.
- ▶ Implemented backend logic for dialogue flow, preference extraction, and inventory integration using Python, Flask, MongoDB, and LLM APIs.

• Tunnel & Landmine Detection Backend System

- ▶ Defence system for detecting underground tunnels and landmines using drone/rover-collected GPR data analysed by an ML pipeline and visualised on a real-time mission dashboard.
- ▶ Architected and developed the FastAPI-based backend from scratch as the communication hub between frontend, ML services, and drone systems, designing API contracts and implementing real-time mission management, GPR detection data transfer and PostgreSQL integration.

• Hasiru Rakshaka (Tree Monitoring System) ✍

- ▶ Designed and deployed the entire backend system using Node.js and PostgreSQL for BBMP's "Hasiru Rakshaka" initiative, which tracks tree plantation drives across Bengaluru. The platform enables users to record plantation activities and monitor the health of over 100,000+ planted saplings.

• Team Collaboration

Collaborated with cross-functional teams to develop and deploy scalable backend systems using clean code, CI/CD pipelines, and Git workflows.