Rushikesh Diliprao Bhomale

Backend Software Engineer | Node.js & Python

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in LinkedIn   ○ rbhomale17   🔗 Tech Portfolio   ⌁ LeetCode   ⊞ HackerRank

🎓 Professional Summary

Backend Software Engineer with ~2 years of experience designing and building scalable backend systems using Node.js, Express.js, Python, and GCP. Focused on microservices, API performance, with a passion for clean code and production-grade backend design.

🧠 Technical Skills & Tools

Programming Languages:
- JavaScript (Node.js)
- Python

Frameworks & Libraries:
- Node.js, npm
- Express.js
- FastAPI
- Flask

Databases:
- PostgreSQL (schema design)
- MongoDB

Cloud & DevOps:
- Google Cloud Platform (GCP)
- Git
- Docker

Tools & Technologies:
- Rest APIs and design, Auth (JWT, RBAC), CI/CD
- Microservices

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

- **Responsibilities**
  ‣ Collaborated with cross-functional teams to develop and deploy scalable backend systems using clean code, CI/CD pipelines, and Git workflows.
  ‣ Build and maintain robust server-side applications and APIs
  ‣ Implement security best practices, including JWT-based authentication and role-based access control

- **Hasiru Rakshaka (Tree Monitoring System)** ⧉
  ‣ Designed & deployed the entire backend system using Node.js for BBMP's tree plantation monitoring initiative, tracking 200K+ saplings across Bengaluru.
  ‣ Developed scalable APIs for activity logging, health monitoring, and reporting dashboards.
  ‣ Ensured high availability and performance with optimised PostgreSQL schema and efficient query design.

- **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.
  ‣ Designed and implemented backend dialogue flow, preference extraction, and inventory integration using Node.js, Express.js, and MongoDB.
  ‣ Delivered a smooth customer experience by integrating LLM APIs and ensuring fast, reliable responses.

- **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.
  ‣ Built authentication and identity management microservices with PostgreSQL schema design, JWT-based REST APIs, and RBAC.
  ‣ Reduced average query resolution time by ~60%

- **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.