Pv Rohan

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Summary

Dedicated Machine Learning Engineer with a strong foundation in a wide range of ML algorithms and predictive modeling. Highly skilled in Python and Java, with hands-on experience in frameworks such as TensorFlow, PyTorch, and Scikit-learn. A creative problem-solver with a passion for transforming data into actionable insights and building intelligent systems. Seeking a challenging opportunity to develop and deploy cutting-edge ML solutions.

Technical Skills

Languages: Python, Java, JavaScript, Dart, SQL
Web Development: HTML, CSS, JavaScript, React.js
Mobile Development: Flutter
Libraries & Tools: NumPy, Pandas, Scikit-learn, Git, Docker, Power BI
Platforms: GitHub, VS Code
Other: REST APIs, AI/ML Integration

CERTIFICATIONS

- Certified Ethical Hacker (CEH) - *EC-Council, Dec 2024*
- Introduction to Machine Learning - *NPTEL IIT Madras, Apr 2025*

Projects

Pulse-Nexus: Multi-Agent Post-Operative Monitoring System Dec 2025
An AI-driven platform that monitors post-surgical patients using wearables and clinical guidelines to detect early deterioration.

- Orchestrated a suite of specialized **Google ADK** agents (*Bio-Sentry, Data-Analyst, Clinical-Core*) behind a unified `/run` API to provide risk scores, reasoning traces, and clinician-ready summaries.
- Exposed and tested the agent network via a localhost API server and a **Postman** public workspace using Agent Mode, scripting 200/422 status tests and auto-generated API documentation.
- Integrated wearable data processing with clinical rule-sets to recommend triage actions, ensuring high-fidelity monitoring of patient vitals and symptoms.
- **Tech Stack:** Google ADK (Python), REST APIs, Postman Agent Mode, JSON validation, Wearable data processing
- **Code:** GitHub Link

InsurRenew Pro: AI Agent for Insurance Renewal Oct 2025
An advanced, bilingual (English/Hindi) AI agent designed to automate the insurance renewal and upsell process.

- Engineered a complex, multi-stage conversational logic using a central System Prompt to handle price objections, perform consultative upselling, and manage user intents without a traditional knowledge base.
- Integrated live, real-world APIs, including **Twilio** for sending functional SMS payment links and **Slack** for instant, contextual human-agent handoff alerts, demonstrating a production-ready mindset.
- Designed and implemented a modular architecture separating conversational logic (Prompt), functional skills (Actions), and technical connections (Integrations), ensuring the system is scalable and easy to maintain.

- **Tech Stack:** Inya.ai (No-Code AI Platform), System Prompt Engineering, REST APIs, Twilio (SMS), Slack Webhooks
- **Code:** GitHub Link

Monacos – Indoor Health Intelligence Hub Aug 2025 – Present

Tech Stack: React (Vite), TypeScript, TailwindCSS, Shadcn UI, Recharts, FastAPI, Python, SQLite, LangChain, Google Gemini 2 Flash, Web Bluetooth, JWT Auth

- Built a full-stack indoor environmental health hub that tracks temperature, humidity, PM2.5, PM10, noise, and light to compute a 0–100 indoor health score aligned with WHO and ASHRAE-style thresholds.
- Implemented a real-time React dashboard with Recharts visualizations, smart alerts for hazardous conditions, and Web Bluetooth connectivity to an ESP32 sensor hub.
- Developed a FastAPI backend with SQLite to ingest multi-room sensor streams, persist device metadata, and serve historical and aggregated analytics via REST APIs.
- Integrated an AI "Health Guardian" using LangChain + Google Gemini 2 Flash that uses 7-day historical data for trend analysis, simple temperature/air-quality forecasts, and environment-specific recommendations.
- Added secure JWT-based authentication with profile management (including avatar support) and role-ready layout for future household or multi-user expansion.
- **Code:** GitHub Link

Education

VIT Bhopal University 2023 – 2027

Bachelor of Technology in Computer Science and Engineering [file:2]