Ravindra Kupatkar Developer

ravindra.kupatkar@gmail.com | +917620623279

PROFILE

A skilled Research and Development professional specializing in Generative AI, with experience in both financial and automobile sectors. Expertise includes model optimization and fine-tuning using Python, and prompt engineering for complex problem-solving. In the financial domain, focused on predictive analytics and risk assessment, while in the automobile industry, driving AI innovation in customer insights and vehicle performance analysis. Demonstrated success in developing Proof of Concepts that showcase AI-driven solutions. Committed to staying current with emerging technologies in AI and deep learning, contributing to innovation in dynamic, research-focused environments.

EXPERIENCE

Developer   2023/06 – present
Tata Consultancy Services (TCS)

- Developed solutions using Google Cloud Platform (GCP) for finance and automobile sectors, including contract content extraction, risk detection, and customer feedback categorization.
- Created algorithms using VertexAI to enhance contract analysis and risk management, and built a Generative AI system for vehicle feedback classification (e.g., Suspension, Engine, Brakes) for NHTSA reporting.
- Designed a bank product search system with integrated FAQs, improving customer information access.
- Built a chatbot to automate sales and finance report analysis, optimizing decision-making processes.
- Participated in code reviews and conducted data modeling, performance, and integration testing to ensure high-quality standards.
- Reduced development time by creating reusable code libraries and quickly adapting to new technologies.

PROJECTS

Fibrossist: Pulmonary Fibrosis detection using Deep Neural Network 🗗   2022/07 – 2023/02

- This project aims to develop a model that predicts whether a person has pulmonary fibrosis based on X-rays.
- We have used ResNet variants such as ResNet-9, ResNet-18, ResNet-34, ResNet-51, ResNet-101, ResNet-152, and GoogLeNet techniques from deep learning to implement this model.
- Among all of the above architectures, GoogLeNet works better for our system, with an accuracy of 98%.

Customer Narratives Categorization for NHTSA (Automobile Sector)   2024/10 – present

- Developed a Generative AI system to analyze and categorize customer feedback from vehicle manufacturers, identifying key issues such as Suspension, Engine, and Brakes.
- Automated classification of feedback into predefined categories like Fuel System, Transmission, Electrical System, and Interior/Comfort for submission to NHTSA.
- Participated in code reviews to ensure high-quality standards were maintained.

- Conducted data modeling, performance testing, and integration testing to optimize the system's functionality.
- Created reusable code components to enhance development efficiency and support future projects.

EDUCATION

Bachelor of technology (B.Tech)   2019/07 – 2023/04 | Sangli, India
Annasaheb dange College of Engineering and
Technology
- Field of Study - Computer Science and Engineering - CGPA - 7.55

PROFESSIONAL SKILLS

- Generative AI
- Google Cloud Platform (VertexAI), AWS Sagemake
- Analytical/Critical Thinking

- Deep Learning
- Prompt Engineering
- Neural Networks

- LLM Fine-Tunning (GPT-4, PaLM-2, Llamma)
- Python
- Agile Development Methodologies

CERTIFICATIONS

The Complete Prompt Engineering For AI Bootcamp
   E1 Competency

Generative Google Learning Series
   E1 Competency

AWARDS

Programming Challenge: Ami-TechFiesta 2021 ⬀   2021/09/04
AMITY University, Gwalior
- Qualifies for the final round of the Programing Challenge: Ami-TechFiesta 2021 organised by the Amity Coding Club at the Amity University Madhya Pradesh on the 4-5th September 2021.

Code With J.A.R.V.I.S. ⬀   2022/03/26
Vasantdada Patil Pratishthan's college of
Engineering, Mumbai
- Code with JARVIS-Online Coding Competition of TANTRA-2021 and achieved merit as RUNNER-UP.

MachineKnight : The Machine Learning Hackathon   2022/09/12
TechBrain
- I won the hackathon by developing and deploying a Machine Learning model for predicting house prices based on various parameters.