Bharat Sanjay Dhande

Email: <u>bdhande45@gmail.com</u> | **Phone:** (+91) 9309795165

LinkedIn | GitHub | Portfolio

Professional Summary

Aspiring AIML Engineer with strong expertise in Large Language Models (LLMs), Generative AI, and Retrieval-Augmented Generation (RAG). Skilled in prompt engineering, fine-tuning, and deploying AI models using frameworks like LangChain, Hugging Face, and LlamaIndex. Experienced in building agentic AI applications, workflow automation (Zapier/n8n), and deploying ML/LLM models on AWS (SageMaker, Lambda, Bedrock). Passionate about leveraging GenAI trends to develop scalable and intelligent AI-driven solutions.

Work Experience

AI/ML Engineer Intern

Marworx Technology | Pune | Aug 2025 - Present

- Fine-tuned transformer-based NLP models (Hugging Face Transformers) to develop a production-ready chatbot, improving intent recognition accuracy by ~85% and reducing response latency by 30%
- Optimized diffusion pipelines for deployment, achieving 20% faster inference and improved scalability.

Technical Skills

- Programming: Python, Java, SQL
- LLM & GenAI: Hugging Face, LangChain, LlamaIndex, RAG, Prompt Engineering
- Frameworks & Libraries: TensorFlow, PyTorch, scikit-learn, OpenCV, Pandas, NumPy, Matplotlib
- Cloud & Deployment: AWS (SageMaker, Lambda), Docker
- Databases: MySQL, PostgreSQL, Qdrant (Vector DB)
- Web & Frontend: Flask, FastAPI, React.js (basic), Streamlit, HTML, CSS, Bootstrap
- Tools: Git, GitHub, VS Code, Jupyter, Postman, PowerBI

Education

Bachelor of Computer Science and Engineering (Artificial Intelligence & Machine Learning)
Saraswati College of Engineering, Kharghar, Navi Mumbai | CGPA:7.6
- 2025

Projects

1) Smart Farm Using Machine Learning | Live link: Smart Farm

- Trained **Random Forest models** for crop and fertilizer prediction using synthetic agronomic data, achieving 93%+ accuracy through hyperparameter tuning.
- Implemented **computer vision**-based plant disease detection using **OpenCV** and used imgaug for robust data augmentation.
- Developed an **NLP**-based chatbot using CountVectorizer and MultinomialNB for intent classification (crop, fertilizer, disease) to automate query resolution and guide users efficiently.
- Built a full-stack Django web app integrating all ML models with **multilingual** support.

2) Big Mart Sales Prediction | GitHub: Big-Mart Sales Prediction

- Developed a predictive model to forecast product sales across retail outlets using machine learning algorithms (Linear Regression, Random Forest).
- Cleaned and preprocessed data, handling missing values and encoding categorical variables for better model accuracy.
- Conducted exploratory data analysis (EDA) to uncover key patterns and relationships in sales data.

3) RAGify – ChatBot | GitHub:RAGify

- Developed an end-to-end RAG (Retrieval-Augmented Generation) chatbot using LangChain, Streamlit, and Qdrant to enable intelligent querying over PDF documents.
- Integrated HuggingFace BGE embeddings and TinyLLaMA (Ollama) to semantically understand and answer user questions based on document content.
- Built a responsive **Streamlit dashboard** that supports **PDF upload, vector embedding generation**, and **interactive chat interface** with embedded document preview.
- Deployed **Qdrant via Docker**, ensuring **real-time vector storage**

Certifications

- ExcelR Data science & Data analytics (Ongoing)
- Microsoft Azure AZ 900 Fundamentals