JAYANT DETHE

Mumbai, Maharashtra

EXPERIENCE

Suvidha Foundation

 $04\ 2025 - 05\ 2025$

ML Research Intern (Remote)

Mumbai, India

- Researched AI-driven pedagogy by reviewing 70+ papers; proposed a RAG-based Transformer model for personalized LLM-powered learning.
- Designed a research-backed LLM-based Nutritional chatbot framework focused on food detection and personalized meal recommendations.

PROJECTS

FinVerse 🗷 | React.js, Express.js, Python, PyMuPDF, RAG

April 2025

- Developed a full-stack GenAI-powered personal finance platform that delivers real-time financial guidance through an intelligent chatbot, with secure user authentication via Gmail.
- Leveraged Google Gemini API, LangChain, and RAG architecture to enable document-based QA, personalized insights, contextual interactions, and financial literacy quizzes—improving user literacy by up to 60%.
- Built with React.js frontend and Flask, Express.js backend for scalability; future enhancements include real-time virtual stock market integration with advanced features.

GradientIQ 🗷 | NLP, Transformers, TF-IDF, Cosine Similarity, Fuzzy Matching, Scikit-learn

Oct 2024

- Built GradientIO, a Machine Learning-based SGPA prediction platform achieving 95% accuracy by analyzing factors such as study habits, absences, tutoring, and extracurricular involvement.
- Applied Scikit-learn and Pandas for data preprocessing and used Matplotlib and Seaborn to visualize insights—delivering pie charts, bar plots, and comparative academic graphs.
- Generated personalized, actionable feedback to help students optimize study time, seek tutoring, and improve overall academic outcomes.

Marathi LLM | Transformers, Hugging Face, PyTorch

Apr 2024

- Designed and trained a Marathi Large Language Model from scratch to generate context-aware and fluent native text.
- Curated and translated a 1M+ English corpus into Marathi using multilingual translation pipelines (MarianMT).
- Implemented custom tokenization using Byte-Level BPE to handle complex Devanagari script effectively.
- Used Hugging Face Trainer API and PyTorch for efficient masked language model (MLM) training on GPU.
- Achieved high-quality generative outputs for use cases like storytelling, chatbot responses, and content synthesis.

EDUCATION

Vidyalankar Institute of Technology

2022 - 2026

B. Tech in Information Technology with Specialization in AIML(Honors) - CGPA: 8.9

Mumbai, India

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript

Web Development: HTML, CSS, Python (Flask), React.js, Tailwind CSS

Machine Learning & NLP: TensorFlow, PyTorch, Keras, Scikit-learn, Hugging Face Transformers, LSTM, Tokenization,

Lemmatization, TF-IDF

Tools & Platforms: Git, Docker, Jenkins, AWS, PyMuPDF, PyPDF2, SQL, Visual Studio Code

CERTIFICATIONS

- Generative AI with LangChain & HuggingFace Udemy• Unity Essentials (Unity)
- Junior Programmer Pathway (Unity)

- Business Management Course IIM Mumbai
- TCS iON Career Edge Young Professional

ACHIEVEMENTS//EXTRACURRICULARS

- Selected among the top 8 teams (out of 100+) in the internal college hackathon for Smart India Hackathon (SIH) qualification.
- Completed an internship at NGO "Shivprerna Dnyanmrut Probodhini Sanstha" under the "One Year One Village Campaign" initiative.