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## PROFESSIONAL SUMMARY

AI/ML-focused Computer Science student specializing in intelligent systems development using Large Language Models (LLMs), LangChain, and agentic frameworks. Experienced in building full-stack AI applications with voice interfaces and multimodal capabilities. Seeking AI Engineer internship to apply machine learning expertise in real-world environments. Strong technical background in Python programming, natural language processing, and vector-based retrieval systems.

## TECHNICAL SKILLS

- **Programming Languages:** Python, C++, Java, Golang
- **AI/ML Technologies:** Large Language Models (LLMs), Transformers, OpenAI APIs, Gemini APIs, Vector Embeddings
- **Machine Learning:** Scikit-Learn, TensorFlow, Neural Networks, Model Training & Evaluation
- **Data Science:** NumPy, Pandas, SQL, Data Preprocessing, Feature Engineering
- **NLP & Text Processing:** spaCy, NLTK, Hugging Face Transformers, Prompt Engineering
- **AI Frameworks:** LangChain, LangGraph, LangFlow, Agent-based Systems, RAG (Retrieval Augmented Generation)
- **Development Tools:** Jupyter Notebooks, Git/GitHub, Streamlit, Flask, REST APIs
- **Data Visualization:** Matplotlib, Seaborn, Plotly

## EDUCATION

**Bachelor of Technology (B.Tech)**, Computer Science and Engineering (Cybersecurity)  
Thakur College of Engineering and Technology (TCET), Mumbai, India  
2022 - 2026 (Expected) | CGPA: 9.14/10.0

## AI PROJECTS

**Deep Research Agentic-AI System** | [GitHub](#) | Mar '25

Developed an automated research assistant using LangGraph, LangChain, and Groq-powered LLMs.

- Engineered modular agent architecture including Researcher, Drafter, and Enhancer components with transparent reasoning chains.
- Implemented integration with academic data sources (arXiv, Google Scholar, Wikipedia, Tavily).
- Optimized for high-quality responses through multiple-source validation and cross-referencing.

**KIRA: AI Tutor - Voice-Enabled Learning Assistant** | [GitHub](#) | Ongoing

Created a multimodal RAG-based educational platform for interactive learning from documents and web content.

- Developed voice recognition interface using speech processing python libraries.
- Implemented multi-agent AI system with specialized roles to reduce hallucinations by 40%.
- Built retrieval system using Ollama embeddings for contextual information extraction from PDFs.

**AI Video Analyzer & Chat Agent** | [GitHub](#) | Jan '25

Built video analysis system with Q&A capabilities using Gemini 1.5 and LangChain tools.

- Implemented video processing pipeline supporting multiple formats (MP4, MKV) for frame extraction and analysis.
- Engineered real-time question answering system using Langchain's DuckDuckGo Tool integration for web-enhanced responses.
- Created secure file handling system and intuitive Streamlit interface for non-technical users.

#### **Eva - Voice-Controlled Desktop Assistant** | [GitHub](#) | Sep '24

Engineered a Python-based voice assistant with AI capabilities and customizable command system.

- Integrated speech recognition and text-to-speech using pyttsx3 and SpeechRecognition libraries.
- Implemented Gemini API connection for natural language understanding and response generation.
- Developed fuzzy matching algorithm for application launching with 95% accuracy.

#### **Valorant Performance Predictor** | [GitHub](#) | [Live App](#) | Nov '24

Created ML-based web application to predict player performance from in-game statistics.

- Achieved 0.89  $R^2$  score using Gradient Boosting Regressor after feature engineering and hyperparameter tuning.
- Processed and normalized player datasets using Pandas and NumPy for optimal model training.
- Deployed as interactive web application using Streamlit Cloud with user-friendly interface.

#### **Movie Recommendation System** | [GitHub](#) | [Live App](#) | Dec '24

Built content-based movie recommendation engine using TF-IDF vectorization and similarity calculations.

- Implemented Pinecone vector database for efficient similarity search across 25,000+ movie entries.
- Integrated OMDB API for movie poster and metadata retrieval from pinecone for performance.
- Created responsive UI with genre filtering capabilities using Streamlit.

## **RESEARCH & ACHIEVEMENTS**

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#### **Blockchain Application for Traceability of Farm Produces**

- Co-authored research paper on blockchain-based traceability system for agricultural supply chain.
- Proposed solution to enhance transparency and reduce fraud in food supply verification.

#### **Phishing Domain Detector - Smart India Hackathon 2023**

- Contributed to ideation of a phishing detection web app using Python and ML.
- Achieved shortlisting at institute level among 50+ competing teams.

## **CERTIFICATIONS & COURSES**

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- Machine Learning - CareerNinja & Cognitive Class
- Deep Learning - IIT Ropar
- Python (Basic & Advanced) - CareerNinja
- Java Programming - IIT Bombay
- Data Analytics - CareerNinja
- Cybersecurity Essentials - Cisco Networking Academy
- Lean Six Sigma AI Yellow Belt - Sparen & Gewinn