# AYUSH DAMBHARE GEN AI SOFTWARE ENGINEER

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## **OBJECTIVE**

Passionate Generative AI Software Engineer with a strong focus on developing intelligent AI-driven applications and enhancing user experiences. Skilled in NLP, machine learning, and backend development, I strive to create innovative and efficient AI solutions. Seeking an opportunity in a collaborative environment where I can apply my expertise, contribute to meaningful projects, and continue growing in the field of artificial intelligence.

## PROFESSIONAL EXPERIANCE

#### **OMNINEURA AI TECHNOLOGIES**

Bengaluru April'2024-Dec'2024

#### Generative AI Software Engineer

- Engineered and deployed a sophisticated chatbot application similar to ChatGPT using advanced LLMs (Llama, Mistral, GPT-40, GPT-40-mini), improving response accuracy and user experience.
- Enhanced user interaction by integrating multimodal capabilities, including image upload functionality, to create a more engaging experience.
- Optimized information retrieval with Retrieval-Augmented Generation (RAG), ensuring more relevant and context-aware responses.
- Applied NLP techniques to improve the chatbot's understanding of complex queries, leading to better user engagement.
- Implemented machine learning models to refine response accuracy and relevance, aligning interactions more closely with user intent.
- Developed an interactive generative AI playground, enabling users to explore various AI functionalities. Key features include:
  - o **Image Generation:** Designed an intuitive setup allowing users to create images from prompts with customizable parameters.
  - Code Generation: Built a module for generating code based on prompts, enhancing the playground's versatility and user retention.
  - o Text-to-Speech and Speech-to-Text: Integrated voice-based interactions to diversify engagement methods.
- Built a robust backend using Python, MongoDB, PyTorch, TensorFlow, Flask API, Hugging Face Transformers, and OpenCV, ensuring efficient processing and seamless multimodal interactions.
- Collaborated with cross-functional teams to integrate the chatbot into various applications, optimizing the user experience across different platforms.

ASIAN ELECTRICAL Nagpur
June'2022-Jul'2022

#### **Electrical Engineering Intern**

- Conducted rigorous testing and analysis on transformers using specialized diagnostic tools and procedures, improving diagnostic accuracy and operational efficiency.
- Performed critical LV (Low Voltage) and HV (High Voltage) tests to diagnose and repair transformers, streamlining the diagnostic process and reducing turnaround time.
- Ensured post-repair functionality and adherence to quality standards by implementing thorough testing protocols, enhancing the reliability of transformer maintenance services.
- Collaborated with a team of engineers and technicians to troubleshoot complex issues, gaining hands-on experience with electrical systems and developing a proactive approach to problem-solving.

## **PROFESSIONAL PROJECTS**

# Movie Ticket Booking System | Python, Machine Learning

March'2023 - April'2023

- Created a user-friendly movie ticket booking system using Python, incorporating data science techniques to enhance recommendations.
- Features included seat selection, showtime filtering, and secure payment processing.
- Machine learning algorithms provided personalized movie recommendations based on viewing history.

# Portable and Smart Packing System for Dairy Application

June'2022 - March'2023

- Developed an automated packing system using Arduino, focusing on hardware integration for the dairy industry.
- Automated the process of filling and sealing bags with the desired quantity of milk or liquid, reducing manual labor.
- The system ensures milk purity and quality while improving packing efficiency.

## **EDUCATION**

S.B. Jain Institute of Technology Management and Research, Nagpur [BE In Electrical] 2023.

#### **SKILLS**

- Generative AI & Large Language Models (LLMs)
- Natural Language Processing (NLP)
- Machine Learning & Deep Learning
- Python, Pandas, NumPy
- MongoDB & Data Management
- Power BI & Data Visualization
- Retrieval-Augmented Generation (RAG)
- Backend Development (Flask, TensorFlow, PyTorch)
- Code & Image Generation Technologies
- Speech-to-Text & Text-to-Speech Integration
- Problem-Solving & Analytical Thinking
- Excellent Communication & Collaboration Skills

## **REFERENCES**

Available upon request.