Rhythm Bhavsar

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EDUCATION

Northeastern University May 2026

MPS in Applied Machine Intelligence Cumulative GPA: 3.8/4.0 **Gujarat Technological University (GTU)**

May 2023

B.Voc in Software Development Cumulative GPA: 9.4/10.0

WORK EXPERIENCE

Voidek Webolutions Bardoli, India

Jr. Data Scientist January 2023 - June 2024

- Developed and deployed scalable Machine Learning models using AWS SageMaker, Lambda, and API Gateway, optimizing realtime data synchronization across CRM and ERP systems, which improved efficiency by 30% and minimized data inconsistencies.
- Fine-tuned the Llama model on personalized datasets to build an AI-powered chatbot, enhancing customer interactions and response accuracy. Additionally, experimented with Large Language Models (LLMs) like GPT and BERT to identify the most effective model for automating business-specific tasks and improving user engagement.
- Automated CRM-ERP integration using **Deep Learning** and **NLP-based** models, reducing manual intervention by 70% and enhancing data accuracy and workflow efficiency. Fetched and processed large-scale real-time data from Putty Server using SQL, deployed models via Flask-based APIs, and ensured seamless integration with enterprise applications for end-to-end automation.

PROJECTS

AI-Powered Waste Recycle Management GitHub

February, 2025

- Developed a CNN-based deep learning model using TensorFlow & Keras to classify waste types, utilizing OpenCV for real-time image preprocessing (edge detection, segmentation, and contour analysis).
- Built an AI-driven recommendation system that suggests biofuel production methods (biodiesel, bioethanol) based on chemical composition analysis and research insights.
- Designed and deployed a Flask/FastAPI-based web interface, enabling real-time waste classification and sustainable recycling solutions

Breast Cancer Detection Using Histopathology Images GitHub

December, 2023

- Developed a CNN-based deep learning model to classify IDC-positive and IDC-negative cases from histopathology images, enhancing early breast cancer detection.
- Applied contrast enhancement, normalization, and data augmentation to improve classification accuracy, optimizing hyperparameters using GridSearch and Transfer Learning (ResNet, VGG16).
- Deployed the model using Flask for real-time inference, enabling integration with healthcare applications to assist pathologists in diagnosis.

News Classification System GitHub

March, 2024

- Designed an end-to-end NLP pipeline for web scraping, text preprocessing, and feature engineering, leveraging NLTK, BeautifulSoup, and TF-IDF vectorization.
- Built and optimized LSTM and Bi-LSTM deep learning models, experimenting with Word2Vec, GloVe, and BERT-based transformers, achieving 84.69% classification accuracy.
- Deployed the system via a Flask-based **REST API**, enabling real-time news classification for content filtering applications.

CERTIFICATIONS AND TRAININGS

Advanced Certificate Program in Data Science

Sept 2023 - May 2024

IIIT Bangalore & upGrad

Data Science Bootcamp Dec 2021 - May 2022

Odin School

Azure Administration Essential Training

October 2024

LinkedIn Learnings

SKILLS

Programming Languages / Paradigms: Python, Functional Programming, Object Oriented Programming (OOP)

Artificial Intelligence: Deep Learning, Computer Vision, Natural Language Processing, Neural Networks, Fine-Tuning LLMs (Llama)

Machine Learning: Transformer Models (BERT, GPT), Reinforcement Learning, TensorFlow, Keras, Torch, Chatbot Development

Data Science / Analytics: IPython / Jupyter Notebook, SQL, Excel, Tableau, Web Scraping, Data Processing & Transformation

Cloud & Deployment: AWS (SageMaker, Lambda), Docker, Flask/FastAPI, REST APIs, Model Deployment & Monitoring

Libraries: NumPy, Pandas, Scikit Learn, TensorFlow, PyTorch, NLTK, Seaborn, Matplotlib, Beautiful Soup, Hugging Face Transformers