

Alan Jiji Varghese

+91 8827898555 / alanvarghese852@gmail.com / www.linkedin.com/in/alan-jiji-varghese-3a0948292 / <https://github.com/AlanJVar>

SUMMARY

Highly motivated and results-oriented CSE AI/ML Engineer with a proven track record in developing and deploying intelligent systems. Proficient in leveraging advanced AI/ML techniques, including prompt engineering (zero-shot, one-shot, few-shot prompting) for large language models. Experienced in designing and implementing conversational AI solutions, as demonstrated by the development of a banking chatbot using IBM Watson Assistant. Skilled in natural language processing tasks such as product feature extraction and sentiment analysis, driving actionable insights from textual data. Eager to apply expertise in AI/ML to solve complex problems and contribute to innovative projects.

TECHNICAL SKILLS

Programming Languages: Python, C++, SQL, MATLAB, Java, HTML, CSS

Deep Learning Frameworks: TensorFlow, PyTorch, Keras, RAG

Libraries & Tools: NumPy, Pandas, Scikit-learn, OpenCV, NLTK, Tableau, Matplotlib, IBM Watson Assistant, IBM Cloud, Oracle, IBM WatsonX

PROJECTS

NSFW-Content-Detection

Jan 2023 – Present

Deep Learning Project

Python, TensorFlow, OpenCV

- Developed an end-to-end system for generating descriptive captions detecting NSFW images on social media.
- Utilized CNN model for image feature extraction.
- This project addresses this by providing a machine learning solution to automatically identify and flag NSFW content, enabling platforms to take swift action (e.g., takedown or age-restriction).

Medical-Image-Classfier-Model

Aug 2022 – Dec 2022

Deep Learning Project

Python, Flask, NLTK, Hugging Face

- This project implements a Convolutional Neural Network (CNN) using TensorFlow and Keras to classify medical images into three distinct categories: X-ray, MRI, and CT scans.
- The model is trained from scratch on a custom dataset.
- This can be useful in various medical imaging workflows, such as organizing big datasets, routing images to appropriate specialists, or as a pre-processing step for more specialized analysis.

EXPERIENCE

Conversational AI Designer

May 2025 – Jul 2025

IBM

Remote

- As a Conversational AI Designer, I was responsible for the end-to-end development of a specialized chatbot tailored for banking inquiries, leveraging IBM Watson Assistant.
- My role encompassed the meticulous design of all conversational actions and their intricate flows, ensuring seamless user interactions for common bank-related queries such as account creation, balance checks, and transaction history.
- Through this work, I successfully delivered an intuitive and efficient AI solution that significantly enhanced customer service capabilities.

Machine Learning Engineer

Sep 2024 – Jan 2025

LearnFlu Pvt Ltd

Remote

- Spearheaded an Iranian Customer Churn Prediction project, culminating in the development and training of a Neural Network model that achieved 94% classification accuracy.
- This initiative involved a complete machine learning pipeline, from detailed data preprocessing and exploratory data analysis (EDA) to model training and rigorous performance evaluation
- This experience honed my technical skills and provided valuable exposure to real-world machine learning applications within business analytics.

RESEARCH WORK

- **EEG Signal Analysis for Seizure and Non-Seizure Classification with Integration of LIME and SHAP for Better Interpretability of the Model**

Published: <https://www.jetir.org/papers/JETIR2507378.pdf>

• **Healthcare Application for EMG Signal Detection using CNN-LSTM model**

Not Published

• **Healthcare Application for Skin Disease Detection using ResNet-50**

Not Published

EDUCATION

VIT Bhopal University

B.Tech. in Computer Science, Artificial Intelligence

Bhopal, Madhya Pradesh

Sep 2023 – May 2027

CERTIFICATIONS

- Data Analytics Job Simulation by Deloitte Australia
- Azure Fundamentals : Microsoft DP 900
- Gen AI using IBM WatsonX
- Cloud Computing
- Applied Machine Learning Using Python