

About me

I am an AI Engineer with hands-on experience in developing AI projects across EDA, NLP, Computer Vision, Deep Learning, Generative Modelling and LLM, and Deployment techniques. My strong educational background in computer science, combined with multiple courses & internships, has allowed me to build accurate models and successfully lead several variety of projects.

Education

Culture and Science City C.S.C

Bachelor of Science in Computer Science
Grade: Very Good with Honors

2020 - 2024

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Skills

Programming: Python, OOP, SQL
Libraries: NumPy, Pandas, Matplotlib, Seaborn
ML/DL: Scikit-learn, TensorFlow, Keras
NLP: LSTM, LangChain, RAG, Chroma Database
Dev Tools: Git, Flask APIs, MS Power BI
Methodologies: Agile, Waterfall

Experience

AI Engineer Intern | Electro Pi

August 2024 - October 2024

- Developed more than 5 LLM projects using LangChain and RAG for creating customized agents to answer business questions and handle data from JSON format.
- Applied the Computer Vision Techniques as OCR to be used in automated invoicing system embedded with LLM to extract the data from processed 1000+ invoices and add it to a database for the system and deployed as API using Flask Apps.
- Implemented other techniques as Speech Recognition models, Wav2Lip for Lip Syncing combined with LLM agent for making human like chatbots.
- Worked individually and as a part of a team using Agile methodology.

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Machine Learning Intern | Prodigy Infotech

February 2024 – March 2024

- Developed 3 Machine Learning projects such as Customer Clustering using K-Means, Dogs and Cats Classification using Support Vector Machine SVM.
- Architected 2 Deep Learning projects such as Hand Gesture classification, deployed 101 Food Type image Classification and identify calories using Deep Learning CNN. Improved the accuracy of both projects to +90%
- In addition, the data analysis, cleansing, preprocessing and visualization parts for 5 projects.

AI & IoT Trainee | NTI

September 2023 – October 2023

- During the 120 hours Training Program, had the opportunity to dive deep into the AI world and mastered AI techniques including mathematics, data preprocessing, cleansing, analysis, and visualization while implementing machine learning and deep learning algorithms and frameworks, and transfer learning. this knowledge enabled the successful completion more than 10 projects.
- Experienced in NLP basic techniques and applying text preprocessing and models as LSTM in projects as sentiment analysis, and on IMDB classification with accuracy more than 95%.
- Experienced in Computer Vision basic techniques as CNN, RNN, LSTM. Applying 5 projects as chest Xray diagnosis, handwritten numbers classification, object detection, face recognition. Improved their accuracy +95%

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- Got hands-on experience on 2 projects as Stock Price Prediction using LSTM model architecture and Housing Price Prediction using Multiple Linear Regression. Enhanced their accuracy +94%.
- Collect, analyze, preprocess and clean 2 datasets then visualize the results for 2 projects.
- Received a Letter of Recommendation after the 1-month virtual internship for professional work.

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Certificates & Courses

Microsoft Learn Student Clubs by EELU

- Data Science & Machine Learning Bootcamp March 2024 - October 2024
Trained on Data Science Techniques as EDA, Data Cleansing, Feature Engineering. Used technologies as Python, Numpy, Pandas, Matplotlib, Seaborn, PowerBI, and Scikit Learn.
- Project: Nasa Hazardous Object Detection
Analyzed the data, removed outliers, missing data, correlated features in the cleaning phase for the imbalanced dataset, use oversampling and downsampling techniques together with Ensemble Random Forest Model to detect the hazardous objects, gained the best accuracy with Testing Recall 97.5%.

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Ministry of Youth and Sports

- Huawei HCIA AI v3.5 December 2023
Learned the foundation of AI from feature engineering, machine learning and deep learning models training and evaluation.

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- Data Analysis & SQL Training Program July 2023
Analyzed databases, applied SQL queries, created dashboards using Microsoft Power BI

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- Python programming language October 2022

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Hacker Rank

- Problem Solving Basic April 2024
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- Python Basic October 2022
[Certificate](#)
- SQL Basic October 2022
[Certificate](#)

ITI – Maharatech

- Python Programming Basics July 2023
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- AI for Everyone (AI4E) July 2023
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AI Camp & Electro Pi

- Langchain with RAG course path August 2024
Two courses for using generative modelling libraries Langchain and RAG using LLM to make customized smart agents and retrieval system.

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Publications

- Graduation Project: AI based Smart Doctor that can talking with patients, diagnosis diseases, recommend medical test, scanning medical imaging scans and tests.
(Achieved winner of “Best Distinguished Applied Solution Showcase” at “Computer Vision Projects Expo 2024” Competition by Ready Tensor)

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