ABESHITH KUMARAVEL

abheshith7@gamil.com | +91 6369804751 | linkedin.com/abeshith-kumaravel
github.com/abeshith | Portfolio | kaggle.com/abeshith

PROFILES

Leetcode: **Abeshith** | **!120+** Problems
GfG: **Abeshith** | **!150+** Problems
Kaggle: **Abeshith** | **Notebooks** Expert

SKILLS

LANGUAGES:
Python | R | HTML | CSS | Java
FRAMEWORKS:
Pandas | Numpy | Sckit-learn
Tensorflow(Keras) | NLTK
Flask | Streamlit
DATABASES:
MySQL
DATA VISUALIZATION:
Matplotlib | Seaborn | PowerBI
AI & DS:
Machine Learning | NLP
Deep Learning(CNN , LSTM) | EDA

EDUCATION

DR.MGR UNIVERSITY
B.Tech in Computer Science -
Data Science and AI
Pursuing | Chennai, TamilNadu
CGPA : 8.61 (5th Semester)

DS COMPETENCIES

Ineuron Full-Stack DataScience
Batch - 2021
Completed comprehensive program
covering data science, EDA, Machine
Learning, Deep Learning and NLP.

COURSEWORK

GRADUATE
Data Base Management Systems
Operating Systems
Computer Networks
Big Data Analytics

COURSERA
Neural Networks & DL
Neural Network Architecture
Activation & Loss Functions
Forward & Backward Propagation
Optimizers

Supervised ML
Supervised Machine Learning
Classification & Regression
Linear Regression
Regularization & Cost Function

EXPERIENCE

MAREESOFT
Software Developer Intern   Jun 2024 - Sep 2024
- Developed a predictive model utilizing historical electricity usage data for **various appliances**, accurately forecasting consumption patterns for the **next 10 days**.
- Created an **chatbot** to provide recommendations for reducing electricity consumption.The chatbot utilizes user optimal usage times and **energy-saving tips**.

PROJECTS

SYNTHETIC DATA GENERATOR   AUG 2024
- Enabled users to upload CSV files, preview data, and generate up to **10,000** synthetic rows and **10 user-defined** columns by sampling without **repetition**.
- Reduced data preparation time by **30%** and enabling faster prototyping and testing. The application supported over **500 active users**, generating an average of **1,000** rows of synthetic within **10 seconds**.
- Optimized ML pipelines with synthetic data, achieving a **20% reduction** in training time.
- Tech Stack: Transformers, GPT2

CHAT WITH PDF   JUN 2024
- Integrated **SentenceTransformer** for semantic embeddings, Processed and chunked text from PDF files into **500-character segments**,and enabling handling of documents containing over **10,000 words**.
- Incorporated a semantic **search feature** that **retrieves** relevant information from the extracted text within an average response time with a retrieval **accuracy of 90%** for user to locating information.
- The search results, including the **page number** and corresponding text, are displayed dynamically.
- Tech Stack: Transformers, all-MiniLM-L12-v2

BUILDING A NEURAL NETWORK FROM SCRATCH   JUL 2024
- Designed and Initiated a **3-layer** neural network architecture with **5 hidden units**, facilitating classification through forward and backward propagation algorithms.
- **Sigmoid** for hidden layer activation,. **Softmax** for output layer,Achieved a reduction in **loss from 2.10** at epoch **0 to 0.60** by **epoch 900** using cross-entropy loss function.
- Achieved a classification accuracy of **90%** on the test set after **1000 epochs** of training, with a **learning rate of 0.01.** Implemented systematic weight updates every **100 epochs**.
- Tech Stack: Neural Networks, Numpy, Pandas

CERTIFICATIONS

NPTEL
- Earned a Elite Certificate in **DataScience for Engineers** with a **67% Score**.

COURSERA
- Completed comprehensive course covering **Neural-Network Architecture Working in DL** Specialization.and Acquired proficiency in **Supervised ML**.