GERLIN NISHITHA G

9345641092

www.linkedin.com/in/gerlin-nishitha

github.com/Gerlin-Nishitha-04

gerlinnishitha@gmail.com

ABOUT ME

Curious by nature and driven by data, I thrive on uncovering patterns and building smart solutions. As a Data Science student, I've worked on data analysis, machine learning models and web development, always seeking to bridge data with real-world impact. A passionate leader and problem-solver, I love collaborating and pushing boundaries in the tech space.

EDUCATION

- SATHYABAMA UNIVERSITY 2022-2026
  BE CSE with Specialization in Data Science
  Current CGPA (3rd Year) - 9.24

- ST.JOHN'S PUBLIC SCHOOL 2020-2022
  Senior secondary (CBSE)
  76%

- ST.JOHN'S PUBLICN SCHOOL 2019-2020
  Secondary (CBSE)
  87.8%

SKILL

- Programming : Python, R
- Data Analysis & Visualization. : Power BI, SQL, Tableau, Microsoft Excel
- Web Development : HTML, CSS
- Machine Learning & AI : Supervised & Unsupervised Learning, Model Evaluation
- Team Coordination
- Conflict Resolution

PROJECTS

UNIQUE FINDS

Developed 'Unique Finds,' a responsive e-commerce gift shop using HTML, CSS, and JavaScript, with Firebase for authentication, product catalog management, and real-time order processing. Designed a user-friendly interface with categorized product listings for easy navigation. Implemented a checkout process and integrated a dynamic shopping cart to enhance the customer experience.

DATA ANALYSIS TOOL

Developed a data analysis tool using Python to process, clean, and visualize datasets. Implemented data preprocessing techniques to handle missing values, outliers, and inconsistencies. Designed interactive visualizations using Matplotlib and Seaborn, enabling users to explore trends and patterns. Integrated automated reporting features to streamline data-driven decision-making.

SIGNVERSE - ASL CHATBOT

Built an AI-powered ASL chatbot to bridge the communication gap for the hearing-impaired. Using Python, OpenCV, TensorFlow, and MediaPipe, the system recognizes hand gestures in real time and translates them into text. The front-end provides a seamless user experience, while a 3D animated avatar created in Blender brings responses to life in sign language. Users can simply sign in front of the camera, see their gestures converted into text, and receive replies both as text and animated ASL, making communication more accessible and engaging.

GLIDEGESTURE – VIRTUAL MOUSE AND KEYBOARD

Designed and developed a real-time gesture-controlled virtual mouse and keyboard system using Python. Leveraged computer vision libraries such as OpenCV and MediaPipe for hand tracking and gesture recognition. The system accurately detects hand landmarks and interprets finger movements to control cursor motion, perform mouse clicks, scrolling, and simulate keyboard inputs. Enabled hands-free interaction with the computer, offering an intuitive alternative to traditional input devices.

CUSTOMER SEGMENTATION USING K-MEANS CLUSTERING

Performed customer segmentation on mall customer data using K-Means clustering. Applied the elbow method to determine the optimal number of clusters and visualized customer groups based on annual income and spending score. Used Python libraries such as Pandas, Matplotlib, Seaborn, and scikit-learn for data preprocessing, clustering, and visualization.

LEGAL DOCUMENT SUMMARIZER

Built an AI-powered web application that summarizes legal documents and extracts key highlights and legal terms from PDF and DOCX files. Utilized Gemini Pro via the Google GenAI API to analyze complex legal text and return structured JSON outputs including summaries, important clauses, and a glossary of legal terms. Integrated Streamlit for an interactive UI and implemented robust text extraction using PyPDF2 and python-docx. Designed the system to provide simplified, accessible insights into legal contracts, enhancing legal document review efficiency.

TAMIL POEM GENERATOR USING IMAGE

Developed a Python-based web application that generates descriptive Tamil text from uploaded images using Google's Gemini API. Leveraged Hugging Face tools and Gradio to build an interactive interface, enabling users to upload images and receive AI-generated Tamil poems based on the visual content.

FINANCE ANALYZER

Developed a personal finance analysis tool that extracts and analyzes transaction data from Paytm PDF statements. Utilized PyPDF2 for parsing text-based PDFs, applied regular expressions for structured data extraction, and designed an intuitive Gradio interface for user interaction. The tool provides insights such as income and expense summaries, unnecessary spending categories, savings estimates, and cost control suggestions to help users better manage their finances.

CERTIFICATES

- Python For Data Science
- GUVI SAWIT.AI Learnathon
- SQl For Data Science
- TATA Data Visualisation : Empowering Business with effective insights
- Introduction to DBMS
- Python

ACHIEVEMENTS

- Student Council Member in School
- Member of ACM Student Chapter at Sathyabama