MY DIGITAL PORTFOLIO

STUDENT NAME: **KEERTHANA A**

REGISTER NO / NMID: **2428B0229 / 811F537FE59F990B8E04CD4506**

DEPARTMENT: **BSC Computer Science with Data Analytics**

COLLEGE: **Tiruppur Kumaran College for Women**

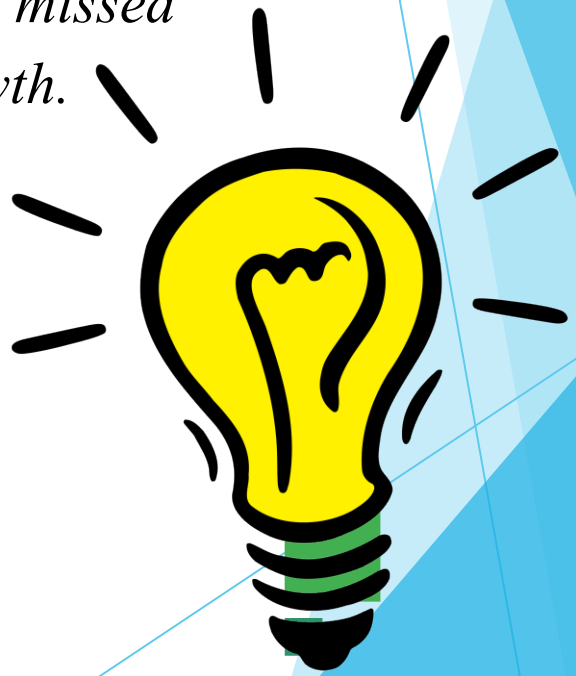
UNIVERSITY: **Bharathiar University.**

AGENDA

1.Problem Statement
2.Project Overview
3.End Users
4.Tools and Technologies
5.Portfolio design and Layout
6.Features and Functionality
7.Results and Screenshots
8.Conclusion
9.Github Link

PROBLEM STATEMENT

In today's data-driven world, organizations generate vast amounts of data daily, but struggle to convert this raw data into actionable insights. The lack of proper data integration, cleaning and analysis often leads to missed opportunities, inefficient decision-making and limited business growth. Without a structured approach to data analysis, trends go unnoticed, patterns remain hidden, and critical decisions are based on intuition rather than evidence. There is a growing need for robust data analytics processes to transform complex datasets into clear,accurate,and operational improvements.



PROJECT OVERVIEW

This project focuses on transforming raw data into actionable insights to support data-driven, decision-making across the organization. By collecting, cleaning, analyzing and visualizing key datasets,the goal is to uncover patterns,identify inefficiencies, and provide recommendations that align with strategic business objectives. The project aims to bridge the gap between data and decision-making through clear reporting, interactive dashboards and predictive analytics.

WHO ARE THE END USERS?

Business Executives & Leadership:

Use data insights to make strategic decisions, monitor KPIs, and asses business performance.

Marketing Teams:

Leverage customer data , campaign analytics, and segmentation to optimize marketing strategies.

Sales Teams:

Utilize sales trends, forecasting, and customer behavior analysis to improve conversion and targeting.

IT and Data Engineering Teams:

Collaborate on data pipeline design, system integration and ensuring data quality.

Operation Teams:

Use performance metrics, efficiency tracking, and supply chain data to optimize workflows.

TOOLS AND TECHNIQUES

1. **Tableau**

   Interactive dashboards and visuals storytelling.

2. **Power BI**

   Business intelligence reporting and visualisation.

3. **Excel/ Google Sheets**

   For data entry, cleaning and preliminary analysis.

4. **Python/ R**

   Programming languages for advanced data cleaning, transformation and statistical analysis.

5. **Exploratory Data Analysis**

   Identifying patterns, outliers and relationships using visual and statistical methods

PORTFOLIO DESIGN AND LAYOUT

Introduction

Full name and title (e.g., Alex Johnson- Data Analyst)

Professional tag line or summary

Contact info(email,personal website)

About Me

Brief professional bio emphasising analytical skills, industry experience and data tools expertise.

Career goals or focus area(e.g., marketing area)

Skills & Tools

Programming languages: Python, R, SQL

Data Visualisation: Tableau, Power BI

Data Bases: MYSQL, PostgreSQL

Data Manipulation: Excel, Pandas

Projects: project Title

Professional Experience: Job Title, companies, and dates

Education & Certifications: Degree and Institutions

FEATURES AND FUNCTIONALITY

1. Data Acquisition and integration

Extract data from diverse sources such as databases, APIs, CSV files, and cloud storage.

2. Data cleaning and preparation

Handle missing ,inconsistent duplicate data and normalize and transform data to ensure quality and usability.

3.Exploratory Data Analysis

Perform statistical summarise and visualisations to understand data distributions.

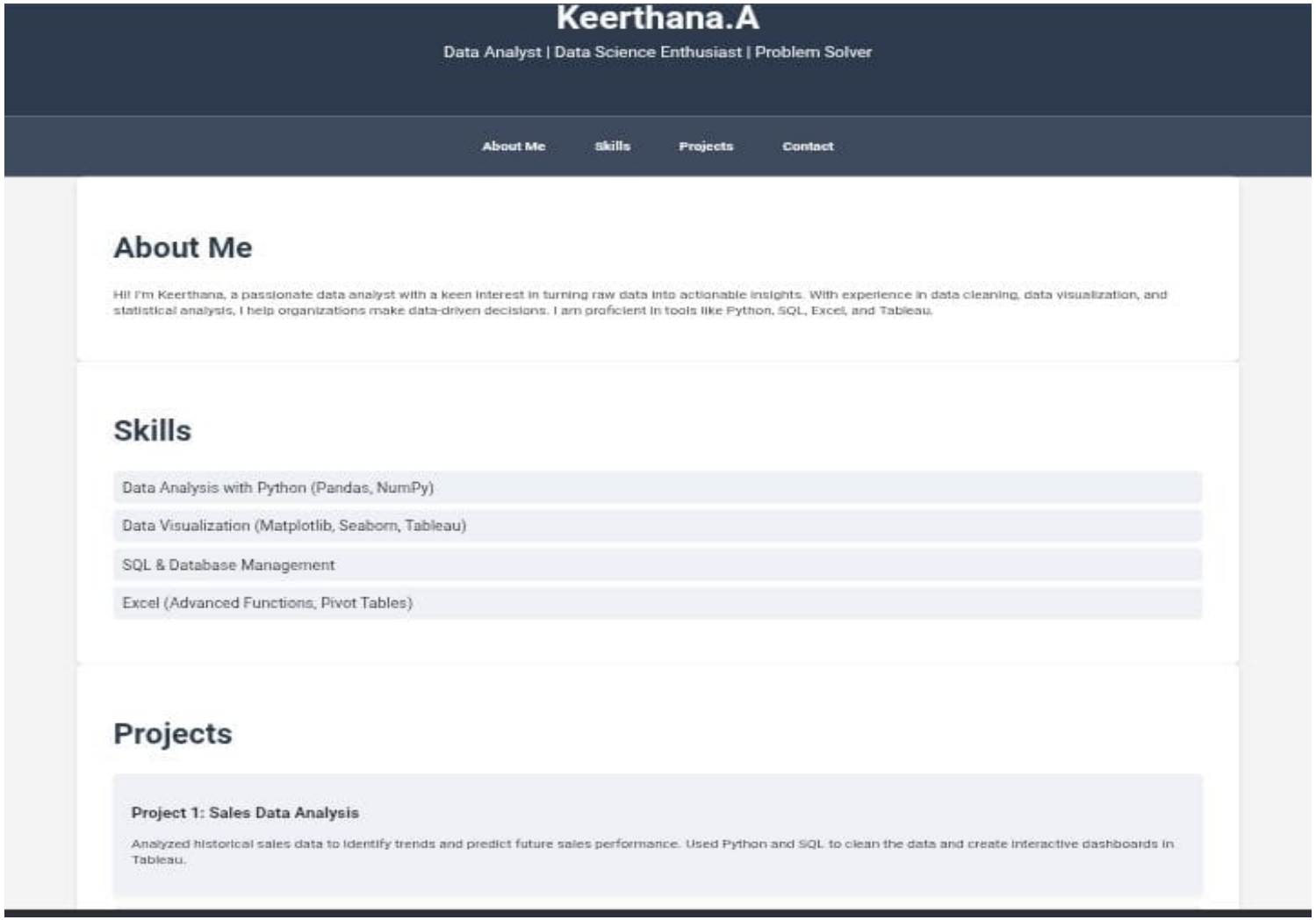
4.Data Visualisation

Create interactive dashboards and develop clear visualisations that simplify complex datasets.

5.Reporting and communication

Generate automated reports tailored for stakeholders.

RESULTS AND SCREENSHOTS



CONCLUSION

Data analysis is not just about numbers, it's about uncovering meaningful insights that drive smarter decisions and real-world impact. As a data analyst, my goal is to bridge the gap between raw data and strategic action by transforming complex datasets into clear, actionable intelligence. By combining technical expertise with analytical thinking, I strive to deliver solutions that are accurate, timely and tailored to business needs. Moving forward, I remain committed to continuous learning, ethical data use, and creating value through data-driven decision-making.

THANK YOU