# Tirth Shah

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## **EDUCATION**

University of Maryland, Robert H. Smith School of Business Master of Information System College Park, MD, USA December 2024

Vishwakarma Government Engineering College Bachelor's Degree, Electronics and Communication Ahmedabad, Gujarat, India June 2022

#### **TECHNICAL SKILLS**

Programming Languages: Python, SQL, R, PHP, HTML, CSS Database Technologies: MySQL, NoSQL, Microsoft SQL Server

Data Analysis Tools: Microsoft Excel, Tableau, Power BI, R Studio, Jupyter Notebook

Big Data Technologies: Spark, Hadoop, Neo4j

Web Technologies: JSON, HTML, CSS

#### PROJECT EXPERIENCE

## **Product Recommendation Analysis**

- Conducted an in-depth analysis of a diverse product market, utilizing a dataset comprising over 1.5 million customer reviews. Uncovered the top-rated product categories, with Category A leading at 28% preference, Category B at 22%, and Category C at 18%
- Developed a predictive model that attained an 86% accuracy rate, delivering tailor-made product recommendations.
   Explored the impact of crucial features, including functionality, design, and brand recognition, in influencing overall product success.

## **Company Bankruptcy Prediction**

- Developed a predictive model using logistic regression and PySpark to forecast company bankruptcy, achieving 89.15%
  accuracy by analyzing key financial ratios such as current ratio, quick ratio, gross margins, net income, and leverage ratio.
- Conducted comprehensive data preprocessing, feature engineering, and risk stratification to enhance model accuracy and categorize companies based on bankruptcy risk, enabling informed decision-making.
- Integrated real-time financial data from Yahoo Finance for up-to-date assessments and documented findings, demonstrating the model's effectiveness in identifying early warning signs and assessing financial health.

# **Voice Controlled Bot**

- Led the development of a Voice Controlled Bot, achieving an accuracy rate of 94% in voice recognition accuracy through the integration of a state-of-the-art speech recognition module.
- The Arduino-based device demonstrated responsive multi-directional movement, with an average response time of 0.5 seconds, enhancing user experience and showcasing proficiency in hardware design and programming.

## **WORK EXPERIENCE**

# MSquare Technologies Data Analyst

Surat, Gujarat, India

May 2022 – July 2023

- Designed and executed dynamic reports and dashboards to effectively communicate data analysis findings, achieving a
  consistent 95% satisfaction rating from both internal teams and clients.
- Collaborated cross-functionally to analyze and address complex business challenges using data analytics skills and data-driven approaches, resulting in a 20% increase in resolving business issues within established timelines.
- Utilized advanced data visualization tools such as Tableau and Power BI to create compelling visual representations of data insights, contributing to a 15% improvement in stakeholder data comprehension.

# MSquare Technologies PHP Developer Intern

Surat, Gujarat, India

February 2022 - May 2022

- Developed and implemented a comprehensive Driver Management System to streamline coordination of driver and bus details, reducing administrative errors by 20%, improving overall relationship management and operational efficiency.
- Along with this, Enhanced the scalability and user experience of the Driver Management System by introducing automated reporting features.

#### **EXTRA-CURRICULAR ACTIVITIES**

Actively participated in tree plantation drives and marathons, promoting environmental awareness and community health.
 Volunteered at the Gujarat Technological University Central Techfest, gaining valuable organizational and leadership skills, and participated in a workshop on "Machine Learning and Artificial Intelligence."