

Soumya Pednekar

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EDUCATION

University of Maryland Baltimore County
Master's in information systems,
GPA: 3.78/4.00

Expected May 2025

University of Mumbai
Bachelor in Information Technology,
GPA: 3.76/4.00

June 2020 - May 2023

TECHNICAL SKILLS

Programming: Python, PL/SQL, PHP/MYSQL, Power BI, Django, C, C++, HTML, CSS, JS.

Statistical: Linear regression, Decision tree, Random Forest, SVM, K-means.

PROJECTS

Amazon Sentiment Review Analysis

March 2024

- Conducted **exploratory data analysis (EDA)** on Amazon reviews using **histograms, word clouds, and time series analysis** with Python, Scikit-learn, Pandas, Numpy, Matplotlib, and Seaborn to derive business insights by classifying reviews as positive, negative, or neutral.
- Trained and evaluated multiple **machine learning models**, including **Logistic Regression (~70% accuracy)**, **Linear SVM (~71% accuracy)**, **Decision Tree (68% accuracy, overfitting issues)**, and **Random Forest (74% accuracy with cross-validation)**.
- Provided **actionable insights** for **product improvements** and **marketing strategies** based on analysis results.

Music Recommendation System

March 2024

- Engineered an **advanced music recommendation system** with Python and machine learning to enhance user experiences. Implemented **normalization and feature engineering**, significantly improving model accuracy and performance.
- Deployed K-Means clustering, PCA, and t-SNE for effective song grouping**, resulting in accurate and diverse recommendations. Conducted data visualization with Matplotlib, Seaborn, and Plotly to uncover trends and optimize strategies.

E-commerce database system (PL/SQL)

November 2023

- Designed and optimized an e-commerce database system** with well-defined tables and foreign key relationships, ensuring **efficient data storage and referential integrity**.
- Developed and implemented triggers** to automate updates of product stock levels and order statuses, **maintaining data consistency across the system**.
- Created stored procedures to streamline complex operations** like order processing and invoice generation, automating repetitive tasks and **enhancing operational efficiency**.

LEADERSHIP EXPERIENCE

Retriever Essentials

March 2024- May 2024

- Assisted in organizing and distributing essential food items and resources to students in need.
- Collaborated with fellow volunteers to plan and execute initiatives aimed at raising awareness and support for food insecurity issues on campus.

Student Council VSIT Mumbai

Public Relation Head

Jul 2021 - Apr 2022

- Secured sponsorships exceeding \$700 from major companies such as Bank of India and BRB Popped Chips, showcasing strong leadership in negotiation and exceptional communication skills.
- Led comprehensive market analysis and implemented effective marketing methodologies to attract prominent influencers and artists, resulting in a notable 30% increase in event participation through decisive problem-solving and rigorous research.

RESEARCH

National Student Research Conference (3rd Position) Issued by Research and Development Committee of Vidyalankar VSIT, Mumbai Mar 2023.

Research paper titled "ChatGPT Opportunities and Challenges" presented in V-Search, a National Level Student Research Paper Conference on Technology, Innovation, and Management as Enablers for Sustainable Development, organized by the Research and Development Committee of Vidyalankar VSIT on 3rd March.

CERTIFICATION

[Specialization in Machine Learning \(DeepLearning.AI\)](#)

June 2024