Fnu Pratichi

Arlington, Virginia | pratichi.lnu@gwu.edu | GitHub | LinkedIn | Medium | LeetCode

EDUCATION

The George Washington University, GPA 3.67/4.0   **Washington, DC**
Master of Computer Science, *Recipient of SEAS Merit Award*   **May 2025**

- Course work: Design and Analysis Algorithms, Database Management Systems, Machine Learning, Cloud Computing, Data Mining, Advanced Software Paradigm, Software Engineering

Savitribai Phule Pune University, GPA 3.7/4.0   **Pune, India**
Bachelor of Engineering in Computer Science   **Oct 2020**

- Course work: Data Structures, Algorithms, Object Oriented Programming, Linear Algebra, Statistics

TECHNICAL SKILLS

- Languages: **Python**, JavaScript, C++, R, HTML/CSS, **SQL**
- Frameworks and Libraries: **Flask**, PySpark, NumPy, Pandas, Matplotlib, Keras, TensorFlow, Pytorch, Scikit-Learn, Plotly, Beautiful Soap, Apache Kafka, **Docker**
- Other Skills: NLP, AWS Cloud, Elastic Search, AWS S3, AWS ECR, AWS EC2, AWS RDS, PostgreSQL, Tableau, PowerBI , Restful APIs, SOAP APIs, Linux OS, Git, Jenkins, Postman, RDBMS

WORK EXPERIENCE

Transportation Data Science Project Community   **Remote, USA**
Volunteer Data Science Contributor   **December 2024 - Present**

- Conducted comprehensive **data preprocessing** and **feature engineering** on a large crash dataset (NYC Open Data, 2012-2024) to enhance data quality and improve analysis for model development.
- Applied **time series analysis** and **geospatial analysis** techniques to identify patterns in crash frequency and regional variations across New York City, providing insights into transportation safety.
- Led **self-guided research** to analyze key factors impacting crash severity and frequency, considering rush hours vs. non-rush hours, supporting transportation infrastructure planning.

Amdocs Development Centre India LLP   **Pune, India**
Software Engineer in Test   **December 2020 – October 2022**

- Streamlined testing processes using **SQL for data analysis**, improving **data handling** and reducing manual testing effort by 50%.
- Collaborated and managed **database** operations for billing, including **migrating** customer **data across environments**, **validating** billing **test cases**, and running scripts to ensure accurate and timely billing, contributing to improved system performance and data integrity.

PROJECTS

Content-Based Movie Recommendation System | DEMO   **December 2024 - January 2025**

- Designed a **machine learning**-powered **recommendation engine** using **Flask APIs** to suggest movies based on user preferences.
- **Containerized** the application with **Docker, hosted on AWS EC2**, and streamlined **deployment** via **AWS Elastic Container Registry** for consistent and scalable performance.

E-Commerce User Navigation Patterns, | [LINK]   **October 2024 - December 2024**

- Harnessed **100,000 large data points** to reveal user behavior insights on an eCommerce platform, driving data-driven decision-making.
- Implemented Mini Batch K-means Clustering to uncover user segments, enabling precision-targeted marketing strategies.
- Leveraged advanced techniques like Association Rule Mining to identify product affinities for cross/up selling and Prefix Span Algorithm to optimize user journeys with predictive session analysis.

Amazon Fine Food Reviews Sentiment Analysis, | [LINK]   **July 2024 - August 2024**

- Leveraged **NLP techniques** and performed **sentiment analysis on 568,000** Amazon Fine Food reviews, classifying them as positive or negative based on ratings using **Python and SQL**.
- Performed EDA, **text preprocessing**, and feature extraction using Bag of Words, Bi-grams, N-grams, and TF-IDF on.

CERTIFICATIONS AND ACHIEVEMENTS

- **AWS** Academy **Machine Learning** Foundations**[LINK].**
- The Data Science Course: **Complete Data Science Bootcamp [LINK]**
- Machine Learning Trainee – Attended **Applied AI** Professional Online Course.
- **Published** a paper on International Journal IJRASET**[LINK].**
- Rookie **Rock Star** Awarded at Amdocs, India, in March 2022 for exceptional early career performance**[LINK].**
- Recognized as **Star of the Month** at Amdocs, India, in July 2021 for outstanding work **[LINK].**
- TDSP **Open-source** contribution **[Link]**