Neha Jagdish Patil

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Education

Master of Science in Data Analytics Engineering   Expected May 2025
Northeastern University, Boston, MA, GPA: 3.8/4.00
Coursework: Data Management for Analytics, Computation and Visualization for Analytics, Data Mining in Engineering
Activities: Director of Events, Data Analytics Engineering Student Organization; Graduate Leadership Institute

Bachelor of Technology in Computer Science   Aug 2017 - Apr 2021
Dr Babasaheb Ambedkar Technical University, India, GPA: 3.56/4.00
Coursework: Data Structures and Algorithms, Object Oriented Programming, System Programming and Operating Systems,
Machine Learning, Artificial Intelligence, Business Management
Activities: Secretary, Debate Society, Organizer, Impetus and Concepts

Skills

Programming Languages: C++, Python, SQL, NoSQL, Unix
Databases: MS SQL Server, MySQL, Oracle DB, PostgreSQL
Visualization Tools: Tableau, Power BI, Visio, Microsoft Excel, Looker
Data Engineering: Database Design, Data Modeling, Data Warehousing, ETL, Big Data Technologies (Spark, Hadoop), Git
Data Science: Classification, Regression, Neural Networks, Descriptive, Quantitative, Predictive, Statistical Analytics
Cloud and Infrastructure: AWS (Redshift, S3, Athena, CloudWatch, EC2, Lambda, RDS, Quick Sight, Data Pipeline, Glue)

Work Experience

AI/ML Engineer , Accenture, *Pune, India*   Oct 2022 - Jul 2023
- **Contributed** to the **development** and testing of **machine learning models** for predictive maintenance in semiconductor manufacturing.
- Collaborated with a multidisciplinary team of data scientists and hardware engineers to improve model accuracy by 20%.
- Investigated cutting-edge **AI/ML** and automation methods to enhance the existing R&D processes.
- **Analyzed** large datasets using **Python** and **SQL** to identify patterns and insights, supporting the R&D team in **innovative** projects.
- Developed and **deployed** a recommendation system for optimizing production schedules, reducing downtime by 15%.

Software Data Engineer, Accenture, *Pune, India*   Jul 2021 - Sep 2022
- Built 210 database objects, complex queries, deployed **125 customizations** in Microsoft SQL Server.
- Streamlined **CRM lifecycle** for Fintech product Voyager by resolving **340 client issues** & reducing resolution time by 25%.
- Developed ETL using Python to load financial data of property and vendor management into databases.

Business Intelligence Intern, V3 Data Solutions, *Nashik, India*   Apr 2021 - Jun 2021
- Developed **ETL** pipeline in data warehouse transforming & loading over 100000 supply chain data points into Databricks.
- **Coordinated** with the supply chain team to automate weekly reports in inventory to reduce manual efforts by 100%.
- Integrated **Power BI** to forecast demand, **supply chain** operations to reduce stock outs by 10%, expenses by 18%.

Projects

Deep Learning and Quantum Generative Models for High Energy Physics Calorimeter Simulations (Link): Developed advanced generative models using deep learning and quantum computing for high energy physics simulations. Achieved a 25% increase in simulation accuracy and **collaborated** with a team of physicists and data scientists.

Database Design for E-commerce Management System (Link**):** Architected Amazon management database, converting UML/EER model into normalized relational model in MySQL, in MongoDB. Resulted in 30% increase in data accessibility.

Movie_recommender_system (Link**):** Developed a personalized movie recommender system using machine learning algorithms to enhance user experience by providing tailored movie suggestions. Developed a personalized movie recommender system using machine learning algorithms, achieving a **30%** increase in user engagement through tailored movie suggestions.

IMDb Movie Data Analysis (Link**):** Performed data preprocessing, exploratory data analysis, time series analysis, predictive modeling using Python & Machine Learning, achieved predictive **accuracy of 91.2%**. Build interactive Tableau dashboard.

HR Analytics Dashboard using Excel, Power BI, Dax (Link**):** Developed Power BI dashboard integrating Excel data, utilizing DAX functions for HR analytics. Streamlined operations, saving 3-4 hours daily for HR team, improved decision-making.

AWS-ETL-DataLake-S3-Songs Playlist (Link): Built recommender systems (**KNN, SVD, Neural Networks**) with 51% accuracy and a sentiment analyzer (**logistic regression, random forest, XGBoost**) with 91.4% accuracy, followed by performance evaluation.

Certifications

LeetCode – 50 SQL Challenge, Hands on Essentials – Data Warehouse , Essential Cloud Infrastructure: Core Services