Shreya Banik

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EXPERIENCE

Cognizant Technology Solution — Kolkata, India
Programmer Analyst — *Oct 2021 – Jul 2023, Full-time*

- Conducted in-depth research on insurance data by utilizing Monthly Service Review (MSR) and analyzing Monthly Metrics.
- Implemented an automatic reconciliation tool using MySQL Workbench and MS-Excel to track 400K+ daily transactions from ServiceNow, resulting in a 78% reduction in resource efforts.
- Applied SQL queries for data manipulation to uncover key-patterns, resulting in a 30% improvement in reporting accuracy.
- Identified and reduced defects by 8X, showcasing effective problem-solving skills and process improvement.
- Documented policy and claims-related large datasets, providing meaningful and complex insights to both technical and non-technical stakeholders.

CBNITS Private Limited — Kolkata, India
Data Analyst — *April 2021 – September 2021, Intern*

- Analyzed large-datasets of Crypto-currency exchange in the application to derive key-insights and connected data sources, MYSQL database, DB2 data-warehouse, and Google Cloud for data storage.
- Performed end-to-end research to inform AI-driven decision-making processes to enhance overall project outcomes and introduced latest classes in app-development to bring improved flexibility and functionality of the application by 68%.
- Teamed up with cross-functional teams to resolve problems in the application by maintaining Excel reports and adding innovative changes in the product.

EDUCATION

University Of New Haven — West Haven, CT
MS in Data Science; GPA: 3.8/4.00 — *Aug 2023 – May 2025*

- Relevant Coursework: Data Science, Artificial Intelligence, Machine Learning, Distributed and Scalable Data Engineering, Computer Vision, Deep Learning, Natural Language Processing, Bayesian Data Analysis

Hooghly Engineering & Technology College — Kolkata, India
B.Tech in Electronics and Communication and Engineering; GPA: 3.5/4 (CGPA: 8.41/10.00) — *Aug 2017 – May 2021*

- Relevant Coursework: Data Structures & C, Object Oriented Programming, Database Management System, Computer Networks, Information Theory, Mathematics, Wireless Communication and Radar Engineering

PROJECTS

Predictive Maintenance for Li-ion Batteries using LSTM-Based Remaining Useful Life (RUL) Prediction

- Developed of an LSTM-based predictive maintenance system on the NASA Battery Dataset using Keras and TensorFlow, managed the ETL Airflow-based data pipeline, data handling, modeling, and result visualization, and integrated Amazon S3 Tool and SQL for efficient database management.

Real-Time Automatic Number Plate Recognition (ANPR) with Computer Vision

- Designed the ANPR system for detecting image based cars with visible number plates on Sequential Convolution Neural Network (CNN) with the VGG16 model, employed Deep Learning concept and Data Augmentation technique to reduce over-fitting by 20%, thereby enhancing accuracy and testing performance.

Statistical Analysis on Accidental Drug Deaths in Connecticut | *Github*

- Analyzed 51.3K entries in real-time using Python key-libraries to reveal trends in drug-related deaths in Connecticut between 2012 & 2022, employed advanced statistical techniques, feature engineering and data visualizations.

CERTIFICATIONS

Machine Learning Pipelines with Azure ML Studio (Feb 2024) : Developed an adult income prediction system on Azure ML Studio, achieving 94.4% accuracy and deploying a boosted decision tree model with an AUC of 0.986 as a web service for inference.

Neural Networks and Deep Learning (Jan 2024) : Learned the fundamentals of neural networks and deep learning, implementing efficient CNN, identifying key-parameters in network architecture, and applying deep learning techniques to real-world applications.

IBM SPSS Statistics Essential Training (Nov 2023) : Worked with SPSS Statistics to analyze data effectively and crafted visualizations to extract meaningful insights, enhancing data-driven decision-making abilities.

SKILLS

Languages: Python, R, SQL, MATLAB, Bash, JavaScript, TypeScript
Libraries: Pandas, Numpy, MatplotLib, scikit-learn, TensorFlow, Keras, OpenCV
Technologies: Flask, SQL Server, MongoDB, MS-Excel, Tableau, Power-BI, Snowflake, Apache Airflow, AWS, Azure
Methodologies: ETL, Agile, Scrum, OOP, Functional Programming, DevOps, CI/CD