PIYALI SAHA

New Delhi, India

Education

St. Xavier's Institution

May 2018 - Apr 2020

Higher Secondary (ISC Board) - Percentage: 87.5%

Kolkata

Vellore Institute of Technology

Jun 2020 – Jul 2025

Integrated MTech in CSE with Specialization in Business Analytics – Grade: **9.29** Coursework: DSA, OS, DBMS, NoSQL, Data Science, ML/DL, Cloud, Analytics

Chennai

Work Experience

Business Analyst Intern

Jul 2024 - Present

Stryker

Gurgaon

- Developed a **PowerApps Inventory Management App**, integrating asset tracking and real-time lifecycle management, reducing manual workload by **70**%.
- Led 10+ requirement sessions, aligned project goals with stakeholders, prepared 10+ URS, documented user stories in ADO, and conducted 3+ UATs, ensuring 95%+ stakeholder satisfaction.
- Gained hands-on experience with **Salesforce CPQ**, optimizing pricing and quoting for product configurations, streamlining the sales process and improving efficiency.
- Created interactive **BI dashboards using Tableau** for finance KPIs, enabling teams to spot trends and boost user engagement by **15% monthly**.

Undergraduate Research Intern

May 2023 - Aug 2023

VIT

Chennai

- Developed a custom **CNN-YOLOv8** model for underwater waste detection with **accuracy of 90%**, optimizing performance for a **20%** faster inference.
- Enabled real-time waste identification, aiding environmental agencies in reducing ocean pollution and improving cleanup efficiency by 25%.

Projects

Similar Template Matching Algorithm and Forgery Detection for Medical Claims | Bajaj Finsery Health

- Implemented ResNet101 feature extraction with **98% feature matching precision** using cosine similarity for efficient template matching.
- Executed an advanced logo matching algorithm, enhancing forgery detection accuracy by **20**%, utilizing computer vision techniques like NMSE, SSIM, and Error Level Analysis.

Credit Card Insights Dashboard using Power BI / Power BI, SQL, DAX, Power Query, Excel

- Uncovered key **customer spending patterns**, where blue and silver cards drove **93**% of transactions and top states contributed **68**% of revenue.
- Analyzed **revenue growth, transaction trends, and delinquency rates**, driving **10**% improvement in customer acquisition strategies and optimizing risk management decisions.
- Built an **interactive dashboard** with real-time **KPIs**, segmentation, and financial metrics, enhancing strategic insights and boosting stakeholder **decision-making efficiency by 20%**.

Publications

- Enhancing Chest X-ray Analysis using Encoder-Decoder with GRU for Report Generation. Link
- A Hybrid Approach for Smart Home Activity Recognition using Sensor Data and Deep Learning Techniques. Link
- Chapter 11 Indian Legal Documents Corpus for Court Judgment Prediction and Summarization: CJPS. Link

Technical Skills

Languages: Java, R, SQL, Python

Machine Learning Algorithms: Linear Regression, Decision Trees, KNN, SVM, Naive Bayes, K-Means Clustering, PCA.

Deep Learning and Techniques: CNN, YOLO, BERT, LSTM, Data Mining, Statistical models

Computer Vision: Object Detection, Image Segmentation, Feature Extraction, OpenCV

Tools and Databases: Salesforce, MongoDB, MS-Excel, AzureDevOps, PowerApps, PySpark, MongoDB Cassandra.

Visualization: Tableau, PowerBI

Achievements

· Winner of SMART INDIA HACKATHON 2023

Dec 2023

· Meritorious Award - 3rd Rank

Jun 2020 - Present

· Career Essentials in Business Analysis by Microsoft and LinkedIn

Sep 2024