

Sagnik Roy

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EDUCATION

University of Michigan-Dearborn

Master of Science in Data Science (GPA: 3.8)

Graduate Teaching Assistant

Courses: Applied Regression Analysis, Computational Statistics, Deep Learning, Advanced Artificial Intelligence

Dearborn, MI

Expected Graduation: May 2026

January 2025 - April 2025

SRM Institute of Science & Technology

Bachelor of Technology in Electronics and Communication (GPA: 9.41/10)

Courses: Programming for Problem Solving, Pattern Recognition and Neural Networks, Probability and Stochastic Process

Chennai, India

May 2022

TECHNICAL SKILLS

- **Programming Languages:** Python, R, SQL, C, C++
- **Tools:** Tableau, PowerBI, Microsoft Excel, Git, Jira, Microsoft Azure, Alteryx, Visual Studio Code
- **Libraries:** Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow, Keras, PyTorch, Neural Networks
- **Certifications:** Data Science and Machine Learning program from Indian Institute of Technology Delhi

WORK EXPERIENCE

Ernst & Young - Global Delivery Services

Pune, India

Associate Software Engineer - Data & Analytics

Aug 2022 - April 2024

- Utilized Azure Databricks and Dataflow to perform advanced data manipulation tasks, creating efficient data pipelines to streamline the data processing workflow and enhance optimization. Awarded with client recognition for performance.
- Leveraged Apache Spark on Azure Synapse Analytics to optimize Extract, Transform, and Load processes, enhancing data warehouse performance by 35%.
- Worked hands-on with MySQL and Azure SQL databases to optimize performance by executing complex queries and maintaining data integrity across environments.
- Analyzed complex datasets by using Alteryx and developed over 30 insightful PowerBI dashboards, transforming raw data into impactful reports. Received a spot award for exceptional contribution.

Ernst & Young - Global Delivery Services

Chennai, India

Data Generic Trainee

Feb 2022 - April 2022

- Developed a COVID-19 analytics model using machine learning and exploratory data analysis to diagnose COVID-19 status. Integrated the model with third-party Application Programming Interfaces for real-time data and health information, with the frontend built on PowerBI to visualize and interpret the insights.
- Led a high-performing team in successfully executing complex projects, driving collaborative efforts, and achieving exceptional results within tight deadlines.

HighRadius

Bhubaneswar, India

Product Intern

July 2021 - March 2022

- Built a banking chatbot using Dialogflow, utilizing natural language processing and machine learning to improve customer interactions and optimize financial services.
- Created a user-friendly note-taking application using React.js that offers a dynamic and responsive interface. The application allows users to effortlessly create and personalize their notes according to their preferences.

PROJECTS

Payment Date Prediction

- Built an Artificial Intelligence-enabled Business-to-Business Financial Technology application to predict invoice payment dates, addressing late payments.
- Employed various machine learning models to identify the one with the lowest Mean Squared Error and highest accuracy. Trained the XGBoost model on historical financial data, achieving 94.76% accuracy in predicting due dates. Designed the frontend using HTML and CSS to visualize and analyze customer and invoice information.

Hospital Readmission Prediction for Diabetic Patients

- Developed machine learning classification models to predict 30-day hospital readmissions for diabetic patients.
- Improved model recall to minimize false negatives, ensuring critical patients are identified and healthcare outcomes are enhanced.