

Sagnik Roy

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EDUCATION

University of Michigan - Dearborn

Masters of Science in Data Science

Sep 2024 - Present

Dearborn, MI, USA

Courses: Big Data Analytics and Visualization, Applied Regression Analysis, Machine Learning and Computational Statistics, Advanced Artificial Intelligence

SRM University

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

July 2018 - May 2022

Chennai, India

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

EXPERIENCE

Associate Software Engineer - Data & Analytics

Aug 2022 - April 2024

Ernst & Young - Global Delivery Services

Mumbai, India

- 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 maintained 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.

Data Generic Trainee

Feb 2022 - April 2022

Ernst & Young - Global Delivery Services

Mumbai, India

- 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.

Product Intern

July 2021 - March 2022

HighRadius

Bhubaneswar, India

- 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.

Movie Recommendation System

- Developed a Content-Based Recommender System to suggest movies based on user preferences and analyze sentiments in their reviews, utilizing a pre-processed Kaggle dataset to enhance recommendation accuracy.
- Applied machine learning models to accurately predict user movie preferences from past interactions and review sentiments.

TECHNICAL SKILLS

Programming Languages: Python, SQL, R, C, C++

Tools: Tableau, PowerBI, Microsoft Excel, Git, Jira, Microsoft Azure, Alteryx, Visual Studio Code

Libraries: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, TensorFlow, Keras

Certifications: Data Science and Machine Learning program from Indian Institute of Technology Delhi