Sayan Banerjee

+44 7407616126 | sayan.tubai@gmail.com | Portfolio

EDUCATION

University of Leeds — Leeds, UK
Master of Science in Data Science and Analytics — *September 2023 – Present*

Institute of Engineering and Management — Kolkata, India
Bachelor of Technology in Computer Science and Engineering — *August 2016 – July 2020*

TECHNICAL SKILLS

Programing Languages: Python, R, C, C++, Java, JavaScript, SQL, NoSQL.
Frameworks and Libraries: Flask, NumPy, Pandas, Scikit-Learn, Matplotlib, Seaborn, Pytorch, BeautifulSoup.
Data Platforms: MySQL, MSSQL, SQLLite, MongoDB, Cassandra.
Developer Tools: Git, DVC, Docker, Kubernetes, Azure Portal, VS Code, PyCharm.
Knowledge Area: Data Analysis, Machine Learning, Deep Learning, Software Development.

EXPERIENCE

Graduate Research Assistant — June 2023 – September 2023
University of Leeds — *Leeds, UK*

- Utilized Generalised Additive Models and Convolution Neural Networks to fast estimate critical stellar parameters like magnetic obliquity angle, inclination angle, and physical compactness using simulated X-ray lightcurves and phase-resolved spectroscopy data.
- Applied Principal Component Analysis to reduce the high-dimensional astronomical datasets, enabling efficient and accurate modeling of neutron star characteristics while preserving essential data features.

System Engineer — October 2020 – August 2023
Tata Consultancy Services — *Kolkata, India*

- Engaged in Azure cloud infrastructure management and environment build activities for a manufacturing execution system web application in healthcare domain for 10+ factories.
- Collaborated with cross-functional teams to design and implement a new containerized version of the existing system using Azure Kubernetes Services thereby increasing the scalability and availability of the product.
- Created automation scripts using Python's Selenium web driver for environment build tasks ranging from installation of custom codes to modeling different manufacturing processes on the web application thereby reducing installation time by 50%.
- Developed Python scripts to connect to MSSQL databases and run scheduled stored procedures, ensuring data integrity and data processing efficiency.
- Optimized existing SSRS reports reduc ing processing time by 30% and improving overall system performance.
- Contributed to Agile Sprints by developing unit and functional tests for over 15 functionalities, accompanied by comprehensive documentation.
- Spearheaded the creation of a new hire training program for the project, leading to a 40% improvement in on-boarding efficiency.

PROJECTS

BigMart Store Sales Prediction | *Python, Pandas, NumPy, Scikit-Learn, Flask*

- Developed a web application by implementing data ingestion, validation and training pipeline to predict the sales of different items in different stores of BigMart.
- **Github**: https://github.com/sayan97/Store-Sales-prediction

Algerian Forest Fire Prediction | *Python, Pandas, NumPy, Scikit-Learn, Flask*

- Developed a web application to predict the temperature and whether there will be a forest fire.
- **GitHub**: https://github.com/sayan97/Algerian-Forrest-Fire

Flipkart Review Scrapper | *Python, BeautifulSoup, Flask*

- Developed a web application to scrap reviews of a product from an e-commerce website called Flipkart.
- **GitHub**: https://github.com/sayan97/Review-Scrapper-Flipkart

Employee Leave Management System | *Python, Flask, MySQL*

- Developed a web application to allow employees and system admins to generate and manage leave applications.
- **GitHub**: https://github.com/sayan97/Leave-Management-System