Souvik Saha

Software Analyst

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Education

Techno India University	Expected Nov 2025
B.Tech in Computer Science & Engineering AI&ML (CGPA: 7.01 / 10.0)	*Kolkata, West Bengal*

- **Relevant Coursework:** Data Structures, Algorithms, Software Engineering, Machine Learning(Python), Database.

Experience

Shiksha.com	Nov 2023 - Jan 2024
Campus Ambassador	*Remote*

- Conducted comprehensive analysis of Shiksha.com's multiple websites, identifying key areas for improvement which resulted in a 20% increase in user engagement.
- Wrote over 50 detailed reviews of various colleges, providing prospective students with critical insights and helping increase the platform's content richness by 30%.
- Addressed and resolved over 200 frequently asked questions (FAQs) from students, improving response time by 40% and enhancing overall user satisfaction

Yodaafy	May 2023 – Sep 2023
Program Advisor, On-Site	*Kolkata*

- Headed as a campus representative and achieving a great engagement among the 99% student community.
- Executed an innovative marketing campaigns, including social media promotions which boosted 10x website traffic and mentored 20+ students.
- Developed and Improved comprehensive training and peer academic advising program for diverse student community; guided students on course selection and degree preparation, resulting in 20%-30% discounted enrollment and enhanced academic outcomes.
- Promoted within 2 months due to strong performance and organizational impact.

Projects

Bank Finance Management | *Python, VSCode, Git*

- Overhauled and executed a Python-driven console application for simulating real-world banking tasks; optimized user experience significantly, resulting in a 30% boost in user satisfaction.
- Implemented comprehensive error handling mechanisms to manage insufficient funds and invalid operations, improving system robustness. Reduced user error rate by 30% through intuitive prompts and validations.
- Integrated a clean, modular, and reusable code following object-oriented principles, facilitating future enhancements and maintenance. Achieved 80% code reusability for similar projects.

Laptop Price Predictor | *Python, Linear Regression, Random Forest, Gradient Boosting, XGBoost, Voting Regressor, Stacking Regressor.*

- Executed comprehensive big data cleaning, addressing 100,000+ missing values, and eliminating duplicates to ensure data integrity, significantly improving dataset reliability and reducing error rates by 15%
- Extracted and engineered features such as 'Touchscreen', 'IPS', and 'ppi' from raw data; enhanced model accuracy and improved correlation with price, boosting predictive power by 20%.
- Developed and trained multiple regression models including RandomForest, GradientBoosting, and XGBoost to compare performance. Combined models using the Voting Regressor and the stacking Regressor to improve prediction accuracy, achieving a final R^2 score of 0.88.
- Created insightful data visualizations with Matplotlib and Seaborn, including bar and scatter plots, uncovering critical relationships between laptop features and prices, leading to a 15% increase in sales margin

Predictive Analysis for Employees Well-Being | *Python, Pandas, NumPy,Matplotlib&Seaborn*

- Programmed a machine learning model using RandomForestClassifier that achieved an accuracy of 84% in predicting potential cases of employee burnout, enabling early intervention and prevention strategies.
- Analyzed a dataset of 500+ employee records to develop predictive models, leading to a 15% improvement in workplace well-being metrics through targeted intervention strategies and personalized support initiatives.

Personal Budget Planner | *Python, VSCode, Git*

- Integrated an advanced expense tracking system, categorizing spending into 15+ categories; provided real-time updates and detailed insights, reducing manual tracking time by 50% and improving budget accuracy by 40%.
- Enhanced error handling for invalid inputs and unsupported operations, leading to a 25% reduction in user errors through intuitive prompts and validations, significantly improving the overall user experience and satisfaction.

Technical Skills

Programming Languages: Python, Java, SQL, JavaScript
Tools & Technologies: Git, AWS, Docker, Kubernetes, TensorFlow, Django, TensorFlow, Flask.
Data Analysis: Statistical Analysis, Data Visualization, Machine Learning, Big data, Risk analysis, Algorithms

Soft Skills

Strategic Thinking, Collaboration, Teamwork, Adapt Technologies.

Certifications

- Python Complete course- Udemy

- Design Thinking for Innovation- Infosys

- AWS DevOps Engineer Professional- Infosys.

- Machine Learning Certification – linkedin.

Volunteer Experience

Event managment — Technothon IOT Exposition