Akshat Rastogi

<u>akshatrastogi6704@gmail.com</u> / (+91) 904-409-2142 | <u>Akshat Rastogi - LeetCode Profile</u> github.com/Akshat-Rastogi-6 / linkedin.com/in/akshatrastogi6704 | **Portfolio** : Akshat Rastogi - Data Scientist

Profile Summary

Aspiring Data Scientist specializing in Al and Machine Learning, proficient in Python, SQL, and C++. Experienced in developing advanced analytics solutions, machine learning models, and data-driven tools. Strong analytical skills in statistical model development, data integration, and identifying trends in large datasets. Proven ability as a data strategist, performing ad-hoc analysis and generating actionable insights. Published research and notable achievements on platforms like LeetCode. Motivated to leverage critical thinking and quantitative analysis to solve complex business problems.

Skills

Languages: Python (Proficient), C++, Java, MySQL, HTML, CSS, JavaScript, PHP

Technologies & Tools: NumPy, Pandas, Scikit-learn, Matplotlib, TensorFlow, PyTorch, Streamlit (Framework), Tableau

Education

• VIT Bhopal University (Expected Graduation - 2026)

B. Tech in CSE with Specialization in Artificial Intelligence and Machine Learning

Delhi Public School (2021 - 2022)

12th Standard - Central Board of Secondary Education

Delhi Public School (2019 - 2020)

10th Standard - Central Board of Secondary Education

CGPA:9.06/10

Percentage: 95.4%

Percentage: 93.8%

Project Work

EvolkAl

- Developed a comprehensive online resource hub for Machine Learning, Deep Learning, and Computer Vision, attracting 1,000 visitors
 and demonstrating user engagement through the provision of practical code examples.
- This resulted in a 20% increase in website traffic through a combination of SEO optimization and ongoing content updates.
- The platform was built using HTML5, CSS3, JavaScript, and Google Ads for promotion.

Energy Insight

- Developed a Machine Learning model using an LGBM Regressor to predict cooling/heating loads and appliance energy consumption, achieving an R² score of 61%.
- This system integrated the Gemini API to provide architectural design improvement suggestions, enhancing building efficiency
- The project utilized Machine learning at the backend using Python, HTML5, CSS3, and JavaScript for the frontend and involved **Generative AI (GenAI)** API integration with Gemini to provide better results and suggestions, Git, and GitHub for version control.

Sentext

- Developed a user-friendly sentiment analysis tool using a Multinomial NB model with 10% increase in accuracy that the previous done work, enabling users to classify statements as joy, sad, anger, disgust, fear, guilt, and shame.
- This resulted in a 15% increase in user satisfaction through a combination of improved model accuracy and interface enhancements.
- The tool utilized Machine Learning, HTML5, CSS3, Python, PHP, and Natural Language Processing techniques.

Achievements

- Achieved top 3 out of 37 teams in a 24-hour hackathon organized by PreProd Corp; developed Auto ML software and secured an
 internship with PreProd Corp in Bangalore.
- Published two research papers in the prestigious EXAI book by Taylor & Francis Publications.
- Authored and presented comprehensive research on Glass Transition Temperature prediction at 2nd International conference at RTASCE 2023 organized by NIT Warangal; findings contributed to a 15% improvement in predictive accuracy for polymer applications.
- Solved over 500 questions on Data Structures and Algorithms using Python and C++ on various platforms.

Notable Certification (10+)

- Earned the Applied Machine Learning in Python Certificate from the University of Michigan on Coursera; enhanced
- Privacy and Security in Online Social Media Elite + Silver Certificate by NPTEL.

Notable Publications

- Machine Learning Advancements in Polymer Material Creation: Successful Prediction of Glass Transition Temperature
 - Developed Machine Learning models achieving up to 95% accuracy in predicting the glass transition temperature of polymer materials, significantly enhancing prediction precision and reliability.
- Exploring EEG Characteristics and Machine Learning Classifiers for Accurate Detection of Eye-Blink Mistakes
 - Developed a Machine Learning framework achieving 96% accuracy in detecting eye-blink mistakes from imbalanced EEG data.
 This framework utilizes various algorithms, including Random Forest, for precise eye movement prediction

Both the papers are published in the esteemed book <u>Explainable AI (XAI) for Sustainable Development Trends and Applications by Taylor & Francis.</u>

Extracurricular and Soft Skills

- Avid Book Reader like reading self-help books like Atomic Habits, Games People Play and many more.
- Fluent in Hindi and English