SURAJ VERMA

ACADEMIC PROFILE

Degree/Certificate	Institution	Percentage/CGPA	Year
B-Tech	Chemical Engineering IIT (BHU), Varanasi	8.07	2025
RBSE (XII)	Govt.se.sec.school kaithoon ,kota	75.20	2020
RBSE (X)	Govt. se.sec. school khera rasoolpur	85.83	2018

SKILLS

Programming Languages: C++/C, Python, SQL, Javascript.
Technologies and Libraries: HTML/CSS, Numpy, Pandas, Scikit Learn, Matplotlib, Jupyter notebook, Power BI, MySQL.
Areas of Interest: Data Structures and Algorithms, Machine Learning, Data Analytics.

INTERNSHIP/TRAINING

Web Development Intern at Webstack Academy   2nd June - 15th July

- Created a dynamic home page displaying a list of restaurants with search.
- Developed a user-friendly food order website using the MERN stack
- Implemented features like user authentication, restaurant browsing, and cart management.
- Designed responsive interfaces ensuring cross-device compatibility.

PROJECTS

Ethanol Concentration Prediction in Distillation Using Machine Learning

Under the Supervision of Dr. Durga Prasad, Professor at Department of Chemical Engineering, IIT BHU

- Implemented, and evaluated multiple machine learning **regression models**, including **Random Forest Regressor**, to accurately predict ethanol concentration, focusing on minimizing prediction error and improving model performance
- Applied dimensionality reduction through advanced feature selection techniques, including Mutual Information, to enhance model interpretability while optimizing overall performance and reducing computational complexity.
- Assessed model performance using **MSE** and **R^2** to evaluate prediction accuracy, robustness, and effectiveness.

Fake News Prediction using Machine Learning

- Built a reliable fake news detection model using **Logistic Regression** to classify news articles as either real or fake, achieving an impressive accuracy rate of 83% on test data, significantly improving content authenticity verification.
- Preprocessed text data with tokenization, stemming, and removal of stopwords to enhance overall model accuracy.
- **Exposure**: Scikit-learn, NLTK for natural language processing, Pandas for data manipulation.

LRU cache in chat applications

- Implemented a chat application chat list using Least Recently Used Cache.
- When a message from a new chat arrives, it will be inserted at the top of the chat list. If the message is from an existing conversation, then it will update the chat position to the top.
- Keeping the user-friendly Interface and clean source code.**Exposure**: DSA.

CERTIFIED COURSES

Geodata Processing using Python, Indian Space Research Organisation (ISRO)

- Completed a course on Geodata Processing using Python, offered by the Indian Space Research Organisation (ISRO), gaining hands-on experience in geospatial data analysis, Python programming for data manipulation.

POSITION OF RESPONSIBILITY

Maketing Executive - Team Trident IIT BHU (Varanasi)   July-22-March-23

- Secured funding through targeted LinkedIn outreach to potential sponsors, successfully initiating collaborations.

Design Team Core Member - Team Trident IIT BHU (Varanasi)   July 22-March 23

- Managed social media content by creating visual assets for Instagram and LinkedIn, boosting engagement.

HONOURS AND ACHIEVEMENTS

Achieved 5th rank in Big Shot 2.0 at IIT (BHU) Varanasi, showcasing strong trading acumen in campus-level competition.

- Awarded the Foundation For Excellence (FFE) Scholarship for academic excellence
- Achieved a Codeforces rating of 1365, showcasing problem-solving proficiency.

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