KAPIL MEENA

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EDUCATION

National Institute of Technology Delhi

Bachelor of Technology (B.Tech) in Computer Science and Engineering (CSE)

Aug 2023 - May 2027

CGPA-6.45

KBDAV Senior Secondary Public School

Central Board Of Secondary Education (CBSE)

XII : 87.8% Apr 2022 – Mar 2023

SKILLS SUMMARY

- Languages: C, C++, Python, SQL, JavaScript
- Frameworks: Pandas, scikit-learn, Matplotlib, Streamlit
- Web Development: Node.js, Express.js, React.js, Next.js, Bootstrap
- Tools & Platforms: Git, GitHub, VS Code, Jupyter, MySQL, draw.io
- Core CS: Data Structures, Algorithms, OOP, DBMS, OS, Software Engineering
- Others: REST APIs, Git Version Control, Debugging, Problem Solving

PROJECTS

Health Insurance Fraud Detection (Machine Learning) 5

- Developed and deployed a machine learning model to detect fraudulent health insurance claims with over 90% test accuracy, using a real-world dataset from Kaggle.
- Analysed and merged inpatient, outpatient, and beneficiary records to engineer meaningful features and uncover complex fraud patterns.
- Trained and evaluated multiple classification models using **scikit-learn**, **including XGBoost and Logistic Regression**, **with GridSearchCV** used for hyperparameter tuning.
- Conducted comprehensive data preprocessing, including **missing value imputation**, **feature encoding**, **scaling**, and outlier removal to ensure high-quality input for modelling.
- 2. Built a secure data-sharing web application using <u>Blockchain to</u> ensure data integrity, transparency, and decentralisation.
- Implemented **AES encryption** and **SHA-256** hashing to protect file contents, enabling tamper-proof file uploads and retrieval on a peer-to-peer network.
- Engineered a secure, private blockchain using **Python** and **Flask**, featuring customised block creation, consensus, and encryption, reducing end-to-end transaction processing time by 15 milliseconds.
- Optimised the system for performance and security, and integrated **Ethereum** testnet using Web3.js.

ACHIEVEMENTS

Obstacle Detection Car Race – Runner-up

April 2024

Intra-college Robotics Competition

Certificate

- Programmed an autonomous navigation system using the C language, reducing lap completion time by 40% through iterative algorithm optimisation, resulting in improved responsiveness and design efficiency.
- Programmed motion logic in **embedded C**, improving lap completion time by 40% through iterative tuning.
- Achieved 2nd place among 10+ teams; recognised for design efficiency and responsive control system.

CERTIFICATES

Web Development Bootcamp - Udemy

Learning HTML, CSS, JavaScript, and building responsive websites.

Machine Learning Crash Course – Google Developers (Audit, No Certificate)

Covering core ML concepts, model evaluation, and TensorFlow basics.