Rakshan Sharma

rakshansharma03@gmail.com | (+91) 7303189559

GITHUB

LinkedIn

SKILLS

- ❖ Java, C++, Data Structures and Algorithm
- ❖ Web Development (HTML, CSS, JavaScript, React, Bootstrap, Node.js) , REST API's
- ❖ SQL – Database
- ❖ Docker, CI/CD pipelining, Amazon Web Services

EDUCATION
_____

- ❖ Computer Science Engineering – Cloud Computing | UPES, Dehradun   (Aug'22 – Present)
- ❖ XII (CBSE) | Mount Litera Zee School, Ghaziabad

ACADEMIC PROJECTS
_____

- ❖ A Real-Time Early Warning System for Forest Fire. [LINK]

    1.Developed an IoT-based real-time early warning system for forest fires and avalanches using LoRa, Firebase, and GPS/GPRS communication.

    2. Implemented machine learning algorithms to predict fire outbreaks and optimize power consumption in long-range, low-power sensor networks.

    3. Integrated Google Maps for location-based alerts and emergency response, ensuring ultra-fast notifications within 250ms using Firebase.

- ❖ Disease Surveillance – Prediction Model.

    1. An AI-driven predictive model was developed based on the SIR framework to monitor and predict the spread of Canine Distemper Virus in Asiatic lions.

    2. Network analysis with clique complexes was used to identify high-risk groups within lion populations to improve disease intervention strategies.

    3. The use of C++ for computational efficiency was employed, integrating epidemiological modeling techniques and real-time environmental data to make accurate predictions of outbreaks.

- ❖ Leave Management System. (Ongoing)

    1. The Leave Management System is a web-based application designed to automate the process of managing employee leave requests.

    2. It helps organizations track, approve, and manage leave applications efficiently while ensuring transparency between employees and administrators.

- ❖ Use of AI, Cloud Services, and DevOps in predicting the human-animal conflict. (Ongoing)

    1. Development of a cloud-based predictive system through IoT, AI, and ML to predict human-wildlife conflict areas.

    2. Application of DevOps in terms of CI/CD pipeline and serverless computing on AWS for real-time data processing and model deployment.

    3. Real-time integration with historical data sources like GPS tracking, weather, and terrain to improve the accuracy of the predictions and prevent conflicts in advance.

CERTIFICATION
_____

- AWS Academy Graduate – AWS Academy Cloud Architecting
- AWS Academy Graduate – AWS Academy Cloud Web Application Builder
- AWS Cloud Practitioner Essentials
- AWS Academy Graduate – AWS Academy Microservices and CI/CD Pipeline Builder

EXPERIENCE
_____

- Social Intern | Sparsh Society   (June'23 – July'23)

    Crafted compelling content and managed social media to boost brand visibility; analyzed engagement metrics to refine our approach and connect with our audience.

ACHIEVEMENTS
_____

- Secured a position in top 10 finalists out of 120 national and international teams in a global Hackathon.