Raj Patle

PROFILE

Aspiring AI & Data Science Engineer | Proficient in Web Development | Competitive Programmer Enthusiastic about AI, Data Science, and skilled in web development. Committed to delivering quality work, dedicated to continuous learning, and eager to thrive in dynamic environments that nurture professional development.

Portfolio:https://portfolio-omega-lac-54.vercel.app/

PROJECTS

Agriventure((Glthub Link)(IOT)

- Present

- Our Smart Water Pump Control System leverages a user-friendly web interface, weather APIs, and crop data to optimize irrigation, conserve water, and enhance sustainable farming productivity.
- Key features include Al-based plant disease prediction, weather updates, automated soil moisture analysis for pump
 activation, crop type analysis, crop suggestions based on soil analysis, e-commerce integration for agriculture products, and
 security measures like animal deterrence, alarms, and CCTV monitoring.
- The methodology integrates Django for remote control, ESP8266 for IoT connectivity, sensors (soil moisture, PIR, DHT11) for real-time monitoring, a relay for automated pump control, Flutter for user interfaces, and Firebase for data management and notifications.

Scure (Github Link)

- Created a healthcare ML model and website for skin cancer prediction, processing over 5,000 images.
- Improved diagnostic accuracy by 20% and facilitated early detection through a user-friendly web interface
- Developed a user-friendly website using HTML and CSS, with PHP for backend processing, allowing users to upload images for skin cancer detection.

Lifeline: Accident Data Analysis for Karnataka State Police Hackathon (Github Link)

- Developed Lifeline, an advanced data analysis system using 300,000 data points and 4 machine learning models, including K-Means clustering and Random Forest classification, to predict accident severity and identify high-risk locations.
- Provided actionable insights for targeted safety interventions and infrastructure improvements, enhancing road safety through data-driven decision-making.

SKILLS

• Front-End Dev: HTML5, CSS3, Django,flask

Back-End Dev: SQL Basics,php,MongoDB

• TOOLS & TECH. : Fast API, Streamlit, Git, Github

- Power Bi , Weka Tool :Data visualization and DM Tool
- C++,DSA,AI/ML Library,Competitive Programming,Python
- Technology:LLMs,NLP,APIs, Transformers

EDUCATION

Pune Institute of Computer TechnologyBachelor's Degree in Ai and Data Science

2024 - 2027

Government Polytechnic Nagpur

Diploma in Computer Engineering

2021 -2024

Percentage :- 94.6/100

Brillect Tech Solutions Pvt. Ltd., Nagpur

(June 2023 - March 2024)

Machine Learning Intern

ACHIEVEMENTS

- Finalist, IdeaStorm 2025 IIT Roorkee :- Selected for the final round, presenting an innovative agritech solution.
- Finalist, TechnoFeat FEAT :- Recognized for technical innovation and problem-solving skills.
- Finalist, Ideabazz Competition 2024 :- Showcased a high-impact entrepreneurial and technical project.
- Finalist, Comp-Ex 24:- Competed at the national level, demonstrating technical expertise.
- 1st Prize, Itech Roots (College Level Among 30+ Teams) :- Secured 1st position for outstanding technical and problem-solving skills.
- 2nd Prize, Ideathon GCOE Nagpur (College Level Among 24 Teams) :- Developed and presented an impactful tech-driven solution.
- Pitched Agriventure at IIM Nagpur :- Presented an innovative solution at a premier management institute.

ADDITIONAL SKILLS

Adaptable and work in a dynamic Environment Hard Working.