THANUSHA A

Frontend Developer | Machine Learning Enthusiast

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Github|LinkedIn | LeetCode |Portfolio

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SKILLS

PROGRAMMING LANGUAGES : C |Java |Python | SQL |JavaScript

FRAMEWORKS AND TECHNOLOGIES : React.js |Figma |Machine Learning

AREA OF INTEREST : Frontend Development | Machine Learning

VERSION CONTROL: Git | GitHub

TECHNICAL EXPERTISE: Data Structures & Algorithms (DSA)

SOFT SKILLS: Communication | Leadership | Teamwork | Collaboration

PROJECTS

🔗 Machine Learning-Based Water Potability Prediction with Geospatial Insights

Methods & Technologies Used: Python, Flask, Random Forest, Gradient Boosting, SMOTE, HTML, CSS, JavaScript, Leaflet.js, CPCB Dataset

➜ By analyzing physicochemical parameters such as pH, hardness, and turbidity, the system determines whether water is safe for consumption.

➜ Additionally, an interactive map visualizes water quality across different locations using real-world data from the CPCB dataset.

➜ This web-based application provides an intuitive platform for users to check water safety in various regions, helping promote awareness and better decision-making regarding water consumption.

🔗 Freelancer Recruitment Platform

Methods & Technologies Used: React.js, Node.js, MongoDB ,Axios API

➜ A web-based platform that connects **freelancers** with **clients** for project-based work.

➜ **Freelancers** can **browse job listings** and **apply** for projects based on their skills.

➜ **Clients** can **post projects**, review freelancer applications, and hire suitable candidates.

➜ Implements **role-based authentication**, allowing users to sign up as **freelancers or clients**.

🔗 Sign Language chrome Extension popup window for browser videos

Methods & Technologies Used: Web Speech API,WLASL dataset,javascript,python,chrome extension

➜ Uses Web Speech API for speech-to-text conversion

➜ Matches extracted words with sign language videos

➜ Preprocessed videos from WLASL Dataset , organised them in folder and generated

EXTERNAL EVENTS & HACKATHONS

TANCAM Women Hackathon – Machine Learning-Based Water Potability Prediction *(Conducted by TANCAM)*
- ➔ Developed a machine learning model to predict water potability using physicochemical parameters.
- ➔ Integrated geospatial visualization using **Leaflet.js** and real-world water quality datasets.

iAccelerate Women Hackathon – Sign Language Chrome Extension *(Conducted by Infosys)*
- ➔ Built a **Chrome extension** for real-time sign language translation in browser videos.
- ➔ Used **Web Speech API** and **WLASL dataset** for speech-to-sign conversion.

CERTIFICATIONS

🔗**FullStack Web development - Udemy**
🔗**Artificial Intelligence - Rinex**

EDUCATION

Bachelor of Engineering (CSE with Honors) SATHYAMANGALAM, BANNARI AMMAN INSTITUTE OF TECHNOLOGY **2023-2027** ● 8.13CGPA (UPTO 3rd SEM).
12th Grade at Sowdambikaa Matriculation Girls Higher Secondary School ,Trichy 2022-2023 ●
Prevailed an aggregate of 91.33%