SIMATS ENGINEERING

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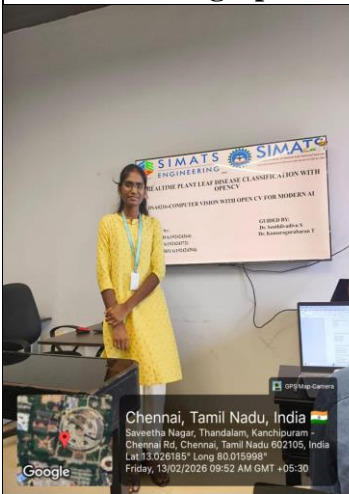
Course Code: DSA0216   **Slot:** B

Course Name: Computer Vision with OpenCV for Modern AI

Course Faculty: Dr. Senthilvadivu S & Dr. Kumaragurubaran T

Project Title: REALTIME PLANT LEAF DISEASE CLASSIFICATION WITH OPENCV

Module Photographs:

Project Description: Result Interpretation and Reporting

   This module is responsible for detecting plant leaf diseases using a trained deep learning model. The captured leaf image is processed through a fine-tuned CNN model such as MobileNetV2 to accurately classify the disease. The model generates prediction results along with confidence scores to ensure reliable identification.

   After classification, the detected disease information is displayed on a visual dashboard. The system shows the disease name, confidence percentage, and possible treatment suggestions. It may also highlight affected areas on the leaf image using visual markers for better understanding.

   In addition to visual output, the module provides multi-language audio alerts using text-to-speech technology. The system converts the diagnosis into spoken output, helping farmers easily understand the results. This makes the solution user-friendly, accessible, and effective for real-time field usage.

Student Signature   **Guide Signature**