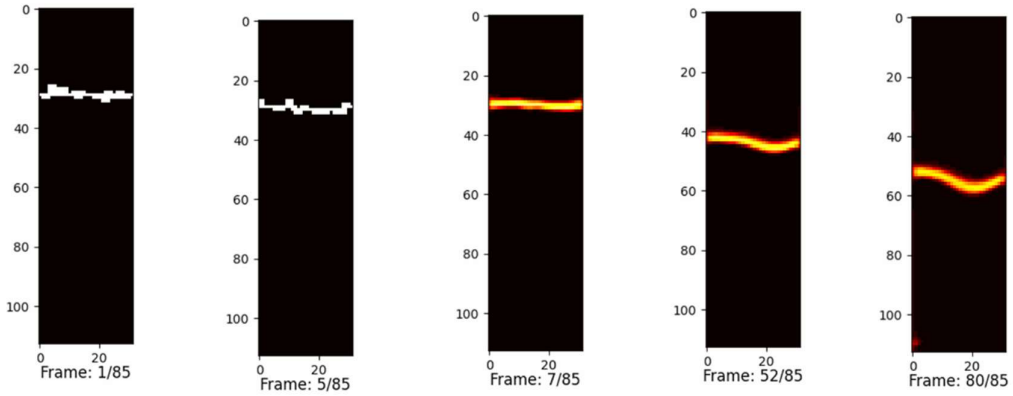
Muhammad Nadhif Nashrullah

Project Portfolio

https://github.com/dipp-12 | https://kaggle.com/muhammadnadhifn

2024 Flame AI Challenge

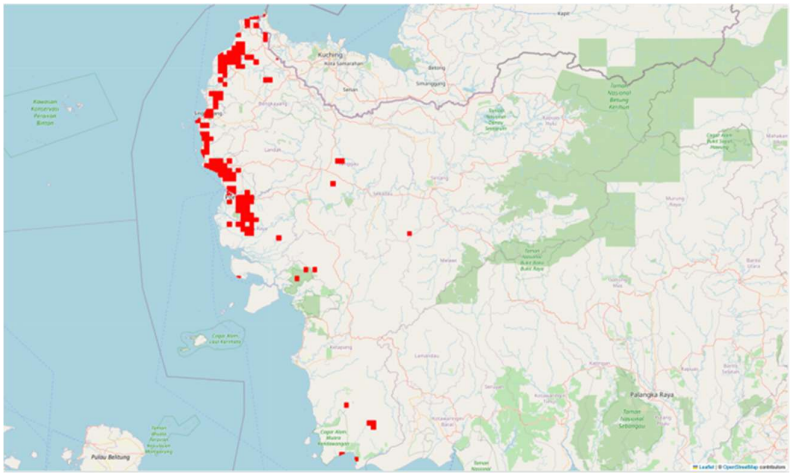


Project Description

Developed a spatio-temporal machine learning model to forecast fire line propagation. This project involved creating an autoregressive model that utilizes historical fire data to predict future fire line behavior. The model effectively combines spatial and temporal features through the implementation of a ConvLSTM architecture.

Technologies Used	:	Python, TensorFlow, ConvLSTM
Link to Code	:	https://www.kaggle.com/code/muhammadnadhifn/2024-flame-ai-challenge-convlstm

Fire Forest Monthly Prediction

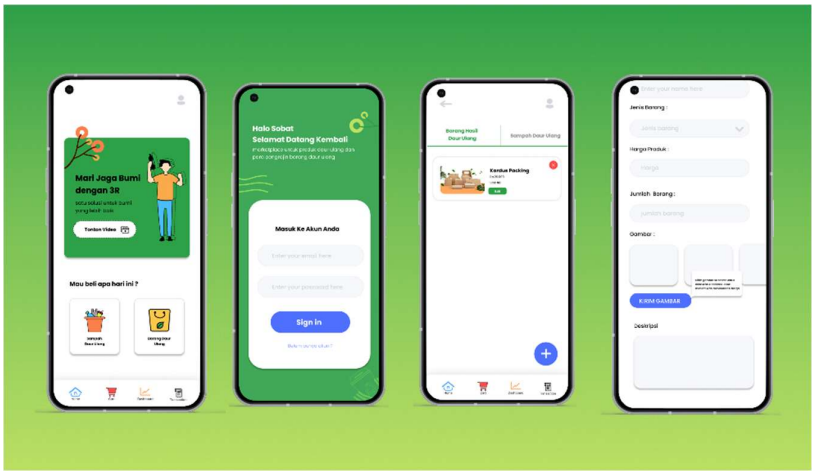


Project Description

Aimed at predicting fire potential in West Kalimantan, Indonesia, for a thesis project at Telkom University Purwokerto. This thesis project focuses on predicting fire potential in West Kalimantan, Indonesia, using Land Surface Temperature (LST) data from MODIS satellites. The goal is to provide a predictive model that forecasts fire risks for the upcoming month, enabling proactive measures in fire management. Extensive data preprocessing and feature engineering were conducted to ensure accuracy in predictions.

Technologies Used : Python, Google Earth Engine, TensorFlow, LSTM, Folium
Link to Code : https://github.com/dipp-12/fire-forest-monthly-prediction

ReCyclo



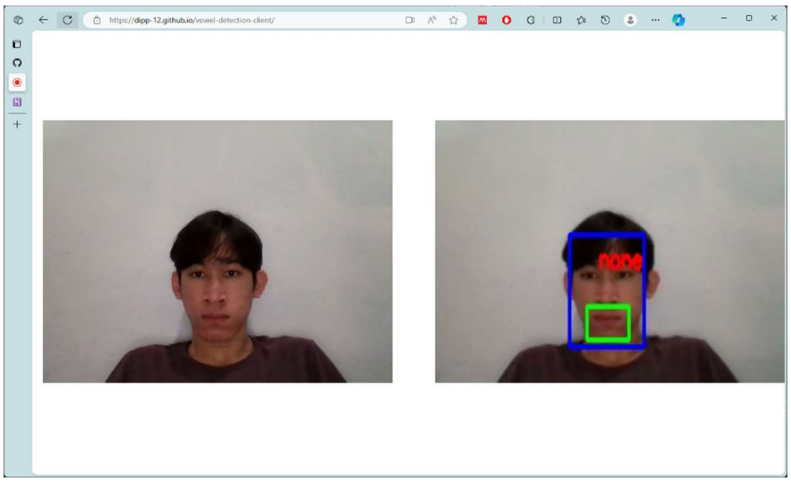
Project Description

ReCyclo is designed as a marketplace for recycled products, promoting sustainability by connecting users with eco-friendly items. The platform includes a geo-based feature

that allows users to post recyclable waste, facilitating local transactions. My role involved developing and deploying machine learning models to classify waste and provide pricing predictions for recyclable materials.

Technologies Used : Python, JavaScript, TensorFlow, TensorFlow.js, Node.js
Link to Code : https://github.com/ReCyclo-Bangkit-2023

Teman Disabilitas



Project Description

This project aims to assist people with hearing disabilities by providing real-time translation based on mouth movements. The current version focuses on predicting vowel sounds from visual cues. The project leverages computer vision and machine learning techniques to enhance communication for individuals with hearing impairments.

Technologies Used : Python, Flask, OpenCV (CV2), TensorFlow, CNN
Link to Code : https://github.com/dipp-12/teman-disabilitas