Helping the Environment through the Use of Web Development and Machine Learning

Sumalinog III, Timoteo (School: Waipahu High School)

For a while, many individuals overlooked the littering crisis and are taking it for granted due to the longevity of the issue. There are those who want to help the environment but there are also individuals who don't know where to start. Therefore, the creation of an easily accessible collection of statistical data for littering cases will help inform organizations/volunteers who want to help this littering crisis. The project will consist of two key components, a Website, and a Machine Learning Mobile Application. The Mobile Application uses Machine Learning to scan and identify trash in the designated area in real time with the phone's camera. A screenshot can be taken and uploaded to the website. The website will then geolocate the submission along with the user's comments. A heat map will be implemented to help display the severity of littering in that area. Once, these aspects are implemented, organizations/individuals who want to help the environment will get an idea of where they can start cleaning. Overall, this project will help those who want to change our environment and resolve this littering crisis.

Awards Won: