

Interactive Dashboard for Vehicle Detection on Satellite Imagery

Project Description:

The primary objective of this project is to develop an interactive dashboard that visualizes vehicle detection model predictions on a map. The dashboard will integrate a satellite imagery-based map interface, enabling users to select a bounding box over a region of interest. The system will dynamically display detection results generated by a model trained on a global vehicle detection dataset. This solution aims to provide an intuitive and interactive experience for users to explore model predictions directly on satellite imagery.

Project Type: Engineering

Internship Batch: Batch 2

Duties/Activities:

- Developing an interactive dashboard with a map e.g. Mapbox.
- Integrating a trained model on the global dataset with the dashboard.

Required Skills: Python, Javascript/HTML

Preferred Intern Academic Level: MS or PhD level

Learning Opportunities: This project is a great opportunity to learn how to develop an interactive dashboard to visualize vehicle detection predictions on the map, and learn about deep learning models for object detection.

Expected Team Size: *one to two interns.*

Mentors

Noora Al-Emadi / nalemadi@hbku.edu.qa

Dr. Ferda Ofli / fofli@hbku.edu.qa