Automated Detection of Traffic Objects
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Sponsor: Ulteig

Ulteig survey drivers manually record traffic signs and stoplights, which is inefficient. Our task was to create a TensorFlow object detection model to automate recognition and recording.

We developed a website where drivers can upload a GoPro video and geo-tracked route, and all traffic objects are inventoried, geotagged, and written to a downloadable csv file.

**AI Model**
Our AI model was built with TensorFlow, an open-source library for machine learning. It was trained on 10,000 images using Roboflow.

**Middleware**
Python was used for the frontend framework Flask and the backend of our model, TensorFlow, enabling communication between them.

**Web App**
Our web app built with Flask allows users to easily upload GoPro video files, view inventory in a table, and download the csv file.