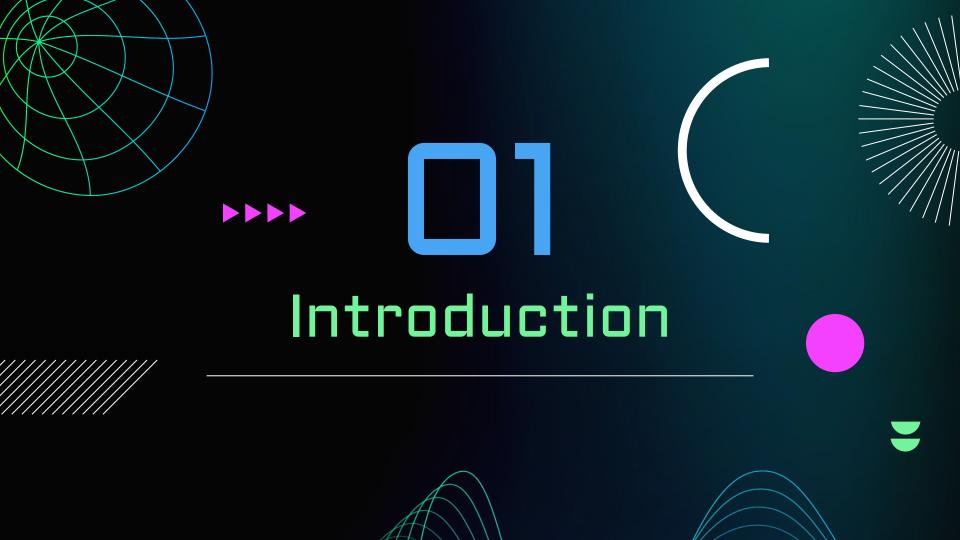
Suspicious & Reckless Driving Detection Model

By HighSafe, In association with BorealisAl







Our goal is to detect if a vehicle is off the road using public road and intersection cameras. In a real world situation, the appropriate authorities will be called if a car is off the road.













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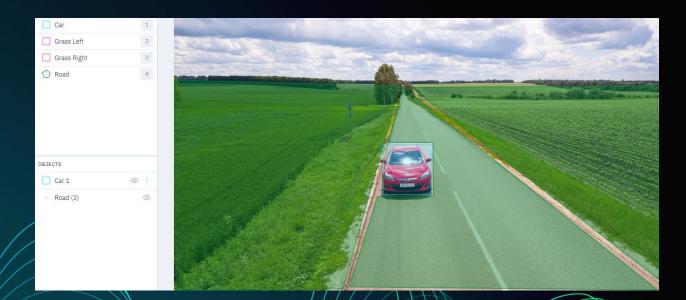


What the model will ideally see



LabelBox

- To create a dataset, we needed a program to label the images
- LabelBox helped us easily upload a large amount of images as well as exporting the results easily





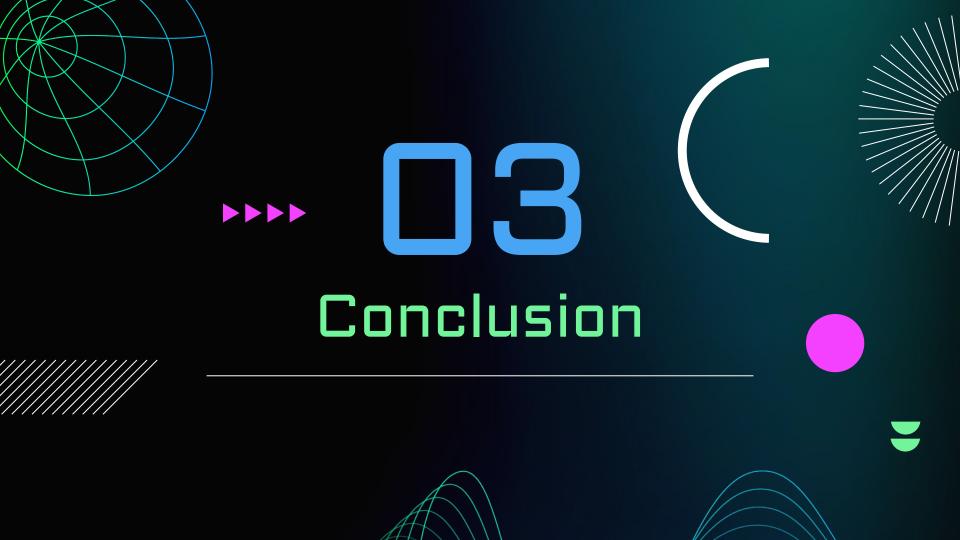
The Dataset



- We wanted to create a large initial dataset
- If this model has any chance of being used by local governments, we would want to maximize our accuracy
- The images in the dataset are labelled with a combination of semantic segmentation (for roads/ditches) and object detection (vehicles)







Problems we faced





Limited Knowledge

Many of us had little experience with PyTorch and ML



Time

A lot of our time was spent learning concepts which limited the amount of time we reasonably had



Edge Cases

We needed photos of cars in ditches to train our model which were hard to come by



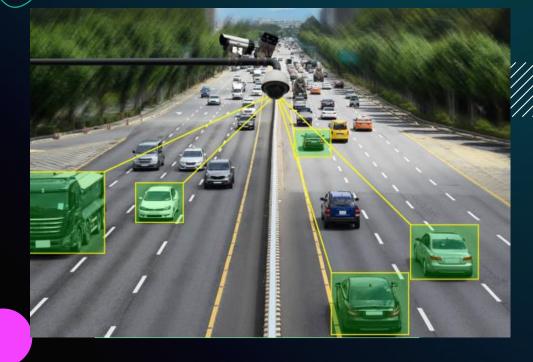








- Finish a viable model
- Create varied data sets including weather conditions
- Add suspicious driving detection (detects swerving, speeding, etc)
- Integrate the model with public road cameras







The End





