



# Car Damage Detection

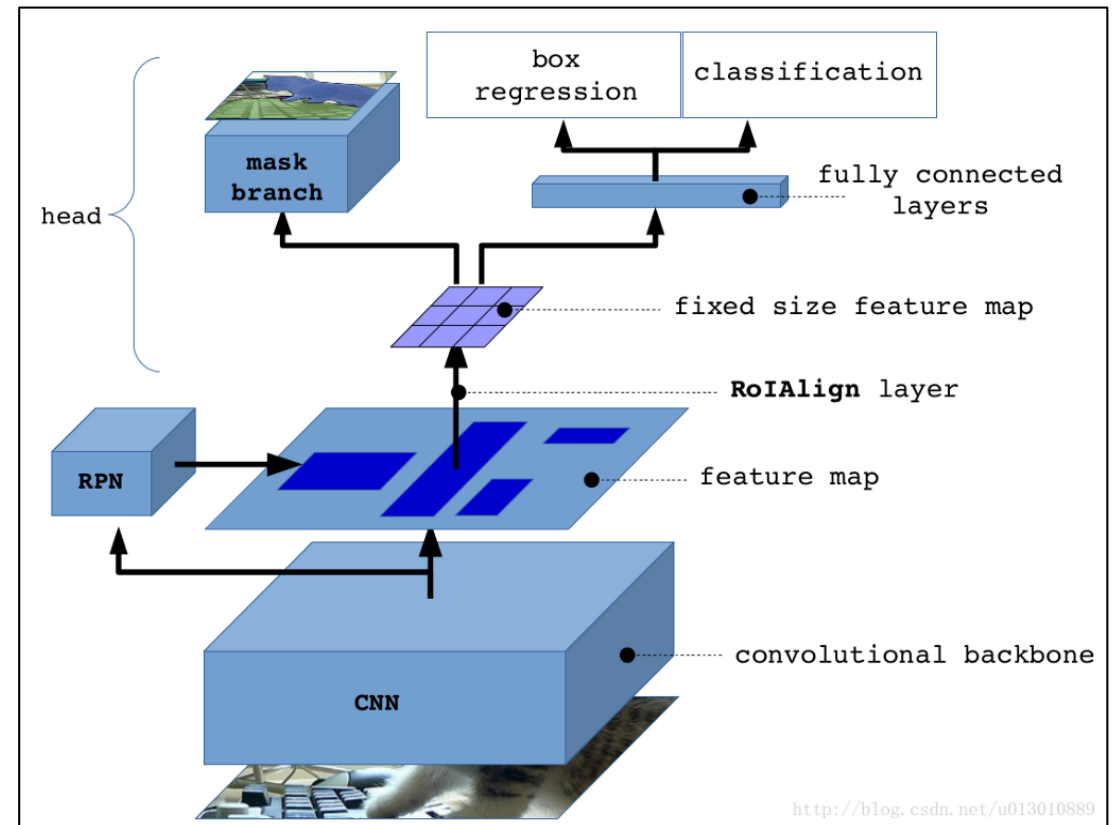
## Goal

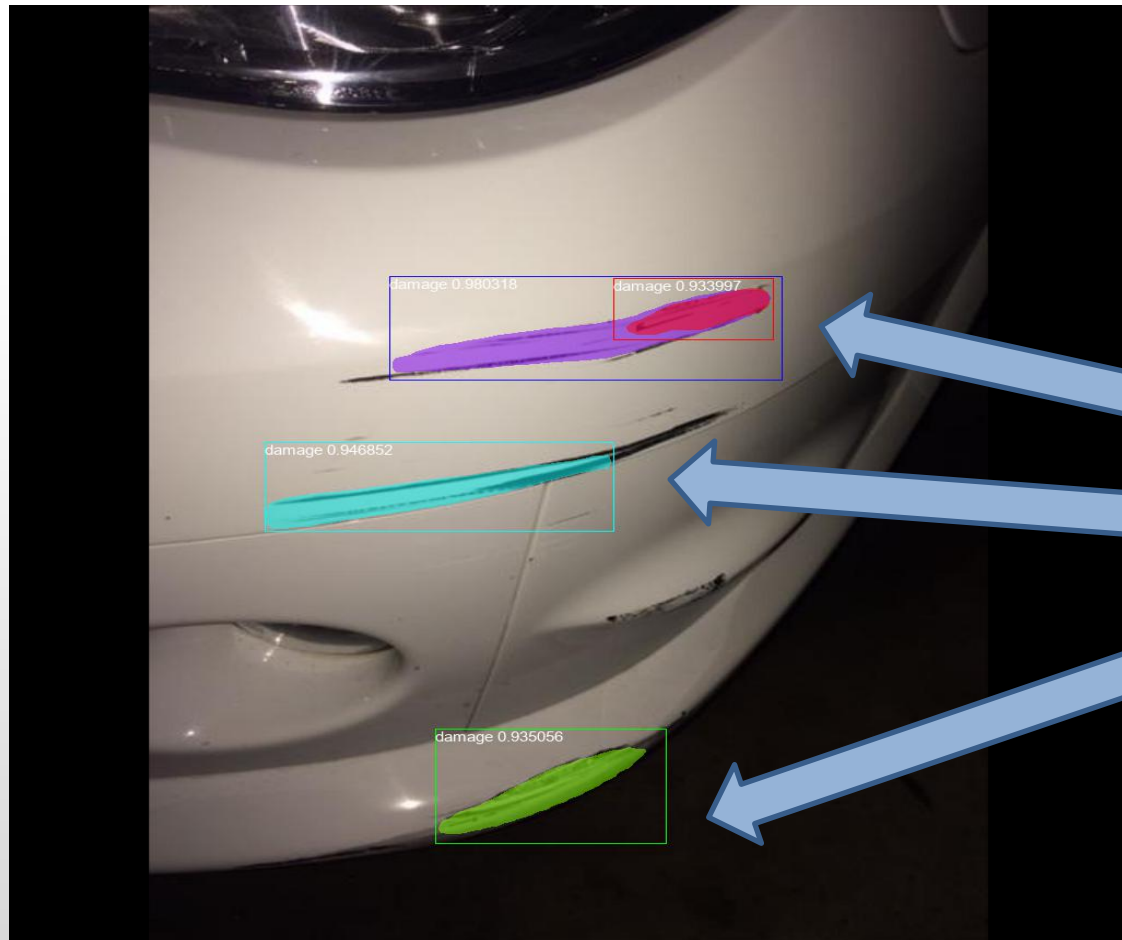
Building machine learning models to identify and extract car damage using instance segmentation

## Dataset

- Used weights from the model trained on COCO dataset
- Train the model using 50 car damage images
- Test the model on 15 images

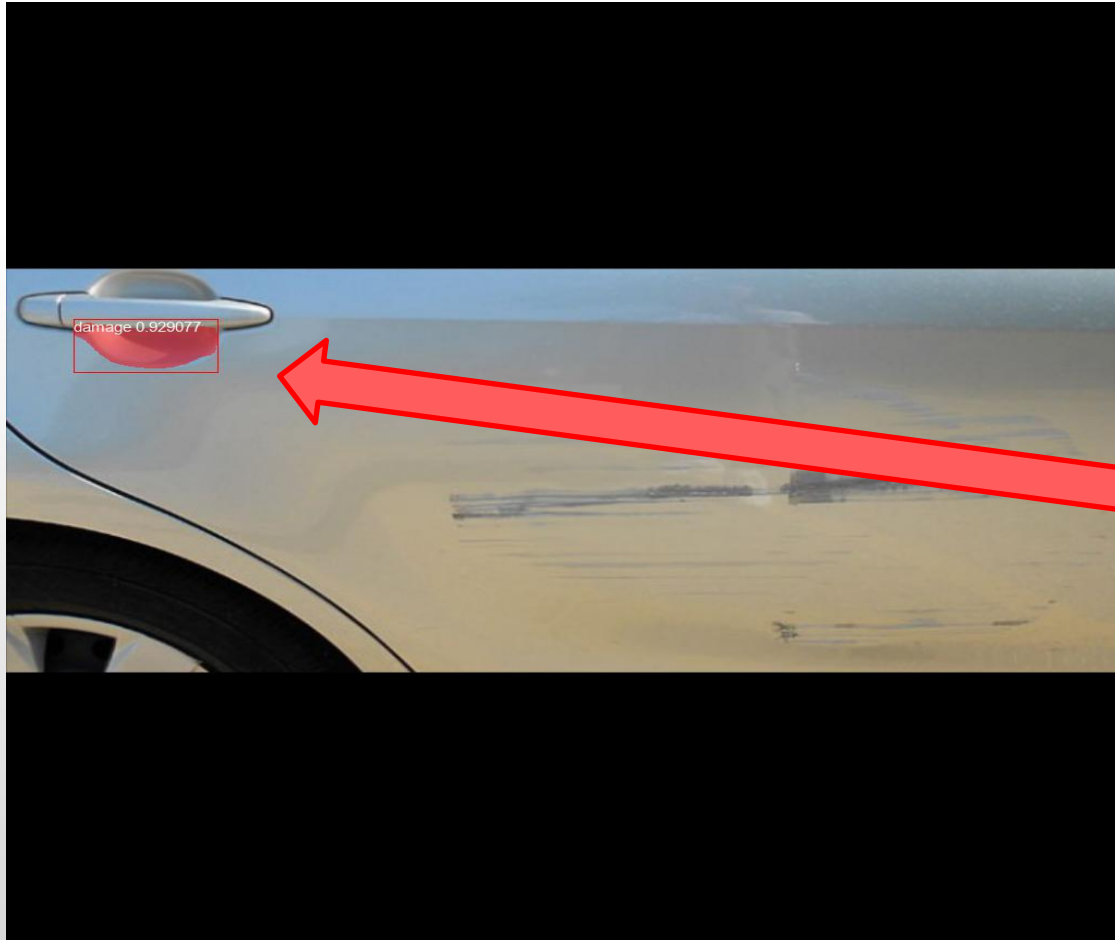
## Modelling





Car Image

**True Positive**  
Car Damages identified by the model



Car Image

**False Positive**

*Instance* Identified as *Damage* by the model

## Observations

- Model performs classification, generating bounding box and **generating the mask**
- Less train data – using transfer learning approach
- Model is able extracts damaged part the from 11 image out of 15

## References

- <https://arxiv.org/pdf/1703.06870.pdf>
- <https://www.analyticsvidhya.com/blog/2018/07/building-mask-r-cnn-model-detecting-damage-cars-python/>