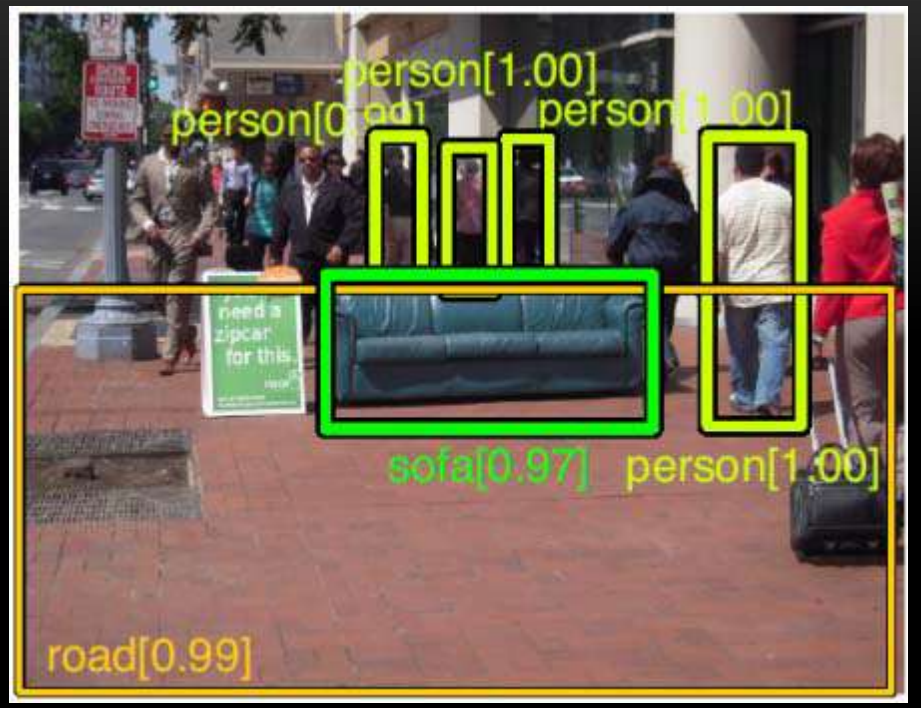
WEB-ASSISTED OBJECT DETECTION FOR OUTDOOR SCENES

Stephanie Morris

THE ISSUE

- Object detection is a large part of Computer Vision
- Lots of false positives


you need a zipcar for this.


person[1.00]
person[1.00]
need a zipcar for this.
sofa[0.97]
person[1.00]
road[0.99]


showcase[0.86]
curtain[0.86]
curtain[0.90]
floor[0.90]
grass[0.86]
car[0.92]

OUR SOLUTION

- Given a query image (with GPS location)
- Narrow down list of possible objects (list of 13 objects such as fire hydrants, lamp posts, and bus stops)
- Database of objects with locations
- Add weight to detections based on how likely it is the image contains that object
- Localize by city

PROGRESS

- Found city with most GIS (Geographic Information System) data relevant to our list of objects
- Tweaked Pedro's object detection code
- Going to make object detection models for four objects (fire hydrants, lamp posts, bus stops, and traffic signals)
- Going to fuse GIS data with object detection