## **Introduction Final Projects**

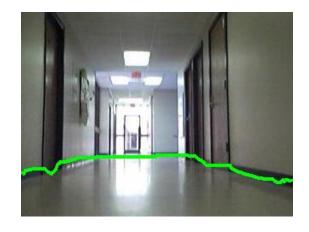
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### Floor Detection



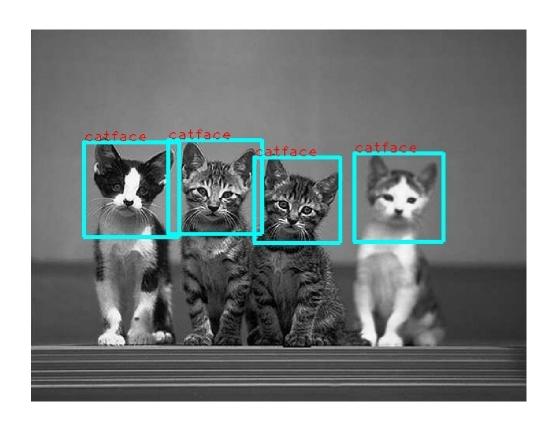
- Study and present one method of floor detection
- Problem:
  - Input: Image are captured from camera
  - Output: the region contains floor in image



# **Object Detection or Classification**



- Study and present state-of-the art for one object detection (pedestrian, car)
- Study and present state-of-the art for object classification (PASCAL challenges)
- Problem 1:
  - Input: Image
  - Output: Position or category of object in image
- Problem 2:
  - Input: Video & Object Sample
  - Output: Position of object in each frame of video





# Traffic Sign Detection and Recognition



- Study and present one method of Traffic Sign detection and recognition
- Problem
  - ■Input: image
  - Output: Position and category of traffic sign

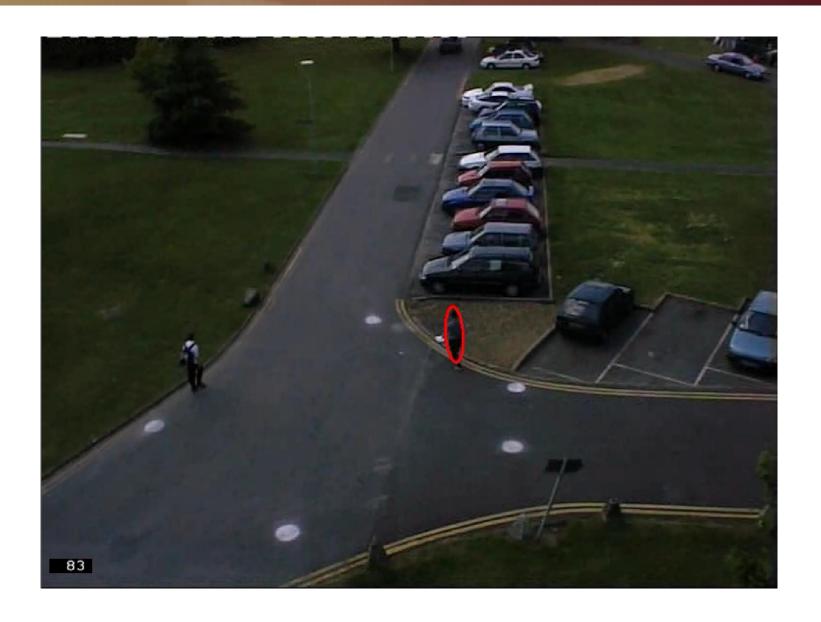
# Example



# Single Object Tracking



- Study and present one method of single object tracking
- Problem
  - Input :Video + Object 's position in frame #1
  - Output :Position of object in each frame of video



# Multiple Object Tracking



- Study and present one method of multiple objects tracking
- Problem
  - Input :Video + Objects' position in frame #1
  - Output :Position of objects in each frame of video



## **QR Code Detection and Decoder**



- Study and present one method of QR code detection and decoder
- Problem
  - ■Input : Image
  - Output :Position of QR code and contents



# **Text Detection and Recognition**



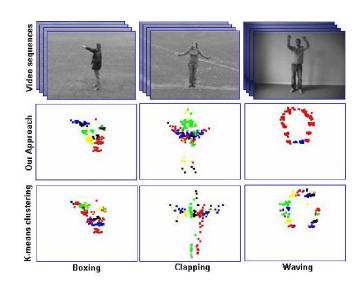
- Study and present one method of multiple objects tracking
- Problem
  - Input :Video + Objects' position in frame #1
  - Output :Position of objects in each frame of video



# Action Recognition In Video



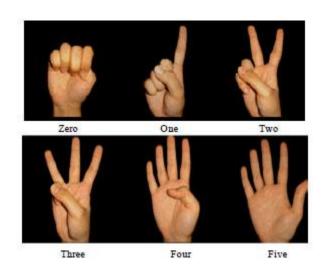
- Study and present one method of action recognition
- Problem
  - ■Input : Video
  - Output: category of action



# Static Hand Gesture Recognition



- Study and present one method of static hand gesture recognition
- Problem
  - ■Input : image
  - Output : category of gestures



# Report Format



- Abstract
- Introduction
- Related work
- Methodology
- Experimental results
- Conclusion and future works

### **Questions**



Thank You!!!