

This is Frustrating team Project Proposal

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1 Introduction

Our goal in this project is to find out what is the hierarchical of objects that people focus on by the analysis of images and video. We plan to apply object recognition/tracking on both image and video dataset first. Furthermore, we want to combine the eye fixation data as the probability representation considering the importance of each object. Currently the rough idea is to generate a Hidden Markov Model to represent the relation between objects recognition results and the probability of them that are important to human eyes. (figure. 1)

Currently we find the dataset from MIT saliency benchmark [1] to generate the basic system dealing with images and their corresponding saliency maps. We are trying to find some available video dataset that can be used in our project.

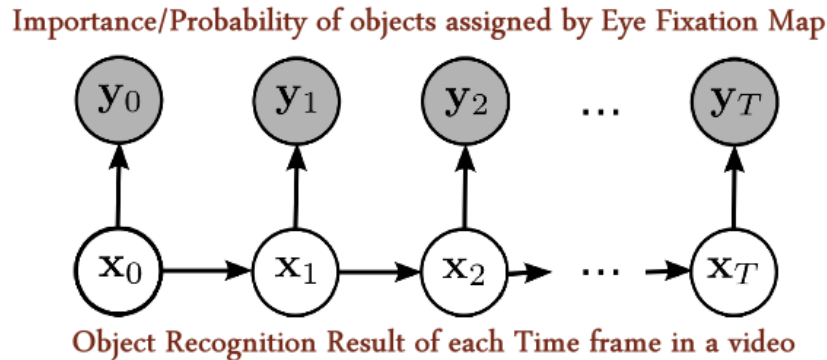


Figure 1: Rough Hidden Markov Model Assumption

2 Task Assignment

Since we only have two people in our group, and we usually meet up and discuss several times a week, currently we don't have any specific task assignment. Belowing is the possible task assignment in the future:

- Karen
 - Collecting saliency map related data
 - Implementation of saliency map generation
- An-An Yu
 - Collecting video data
 - Implementation of video information extraction

References

- [1] Zoya Bylinskii, Tilke Judd, Ali Borji, Laurent Itti, Frédo Durand, Aude Oliva, and Antonio Torralba. Mit saliency benchmark. <http://saliency.mit.edu/>.