**CSCI992 PROJECT PROPOSAL**

**Tracking Learning Detection and labeling the objects**

Group members:

…

1. Summary

This section includes the main information about our project topic which called Tracking Learning Detection. In this part, we should introduce some basic terms, ideas and functions for those readers who will not focus on the area. Our project based on the open resource which called OpenTLD. Using this algorithm, we will add other functions especially labeling the object.

The proposal should include the following elements:

1. Simply identification and purpose of our project.
2. Topic definition.
3. Background of OpenTLD.
4. Some basic knowledge about out project.
5. Project plan.
6. Risk assessment.
7. Introduction

First of all, we should talk about the reason why we choose this topic. Because recently so many people are good at using phone and computer system with internet developing, we want to develop a program or application to help people especially for students on the GPS map. Based on OpenTLD which is very popular algorithm, we want to use this algorithm to follow and track the object in the camera on phone. We will use the GPS and develop IOS platform.

1. Topic definition

The definition of our project topic is tracking and following the object which was select in long term.

1. Background on OpenTLD

Tracking learning detection is a kind of tracking algorithm which can follow the object in long time. For the long-term video, we should focus on the object which contains the human, car and some special areas. The process of OpenTLD is divided in three part. First part is learning part. In this part, we should select one area in the video. Then the computer will know the area which was selected is an object have to be follow and tracking. Secondly, with the video playing, the target should be followed until we stop that. Final part is processing the cases when the object was covered or changed in different angels. This algorithm used in camera photo and map.

1. Some basic knowledge of Tracking Learning Detection

There are two model in old and traditional long term tracking which are tracking and detection. For the normal algorithm, once the object was selected and initialized, the computer can predict the object moving in the future. But when the object disappears and occur in the video again, the computer can not know and follow the object. However, the TLD algorithm can build a set to store the object in different conditions. So when the object occur again, the computer can follow that.

For the labeling part we want to let the user to choose the object in the system. Then the users open the camera walking until found the object. Once the object was found, the text and label will occur on the object.

1. Project plan
2. Risk assessment

In this part we will talk about the risk assessment.

Because we will use the GPS on our application so if users do not trust our application, we just can follow the object instead of helping users to find the object. If users open the location to our system, it is easy to disclose the information and location.