Hand in the Dark:

Standardized Hand Gesture Recognition

A Course Project of Northwestern EECS 349, Spring 2015 (Instructor: Prof. Doug Downey)

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1. Introduction of Task
   1. Definition

Gesture recognition is to interpret human motion after capturing the image. In this project, the input is a hand gesture picture, and the output is type of gesture as pre-defined in the dataset.

* 1. Motivation

This task is meaningful and desirable for its wide range of applications, including various commands, UI’s and communication programs. For example, people can use gesture to send simple commands to the computer via a camera without touching the keyboard.

1. Information of Dataset

In this project, we focus on gesture recognition of standardized pictures, i.e. how to take standardized hand gesture pictures, and how to classify them.

* 1. Source of data

We create the dataset through a code that captures frame-by-frame pictures when taking videos. By

* 1. Pre-processing

1. Test
2. Occupier

Then continue to provide a more detailed final report (this can be pdf or html format, and should be about 1.5 pages in length excluding figures. The number of figures you can include is arbitrary, but be selective). This more detailed report should give specific information on your investigation. What methods did you try, what are the details on your data set (number of examples in training/test sets, specific features employed) and results of your experiments along with analysis and brief suggestions for future work.

# Link for GDrive folder

<https://drive.google.com/drive/u/1/folders/0B-H16CEA6Jgxfk9rT2VfM19yUHVzamNpcDRqa3FIc0VMY1llYnctTW1ybW04ckNQc0M4NzA/0B-H16CEA6JgxflVlRXdyMTBobXBXWGEyQU15TG1mXzh6QU53bXdNSHZjZXZoZVljcEpONVE/0B-H16CEA6JgxfnN2V1IwZUFWY0dZWXhVX3lKdUM0WF9GSUNRTVh1SmxoT0FlSm45T05ZVjQ>