Hierarchical Multiclass Object Classificaiton

First Author
Institution1
Institution1 address
firstauthor@i1.org

Second Author
Institution2
First line of institution2 address
secondauthor@i2.org

Abstract

Human can use similarity between objects in order to recognize rare objects. They also make many abstract concepts when they see some objects very often. Interestingly, a large part of brain is associated with common classes like faces rather than rare objects like Ostrich. In our work we want to propose a model that has four mentioned characteristics. 1. Use more resources for categories that have many examples and less resources for categories that have few examples. 2. Has the ability recognize objects that it has never seen before, but can be made by combining previously seen objects. 3. Objects with few examples can borrow statistical strength from similar objects with many examples. 4. Models that have lot of sharing between model parameters of different classes should be favored.

1. Introduction

2. Previous work

3. Hierarchical Classification Model