# Plankton Classification of WHOI

Jinna Cui

Vision Lab of OUC

2016.11.28

vision@OUC

# Table of contents

vision@OUC
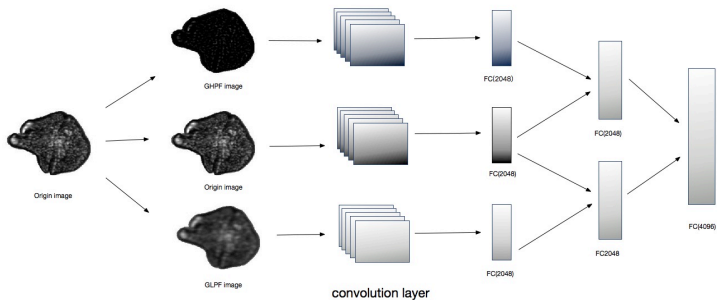
# Introduction of WHOI

**WHOI**

**Large:** 103 classes   more than 3.23 millions images

**Imbalance:** 5 large classes

vision@OUC

# Filter
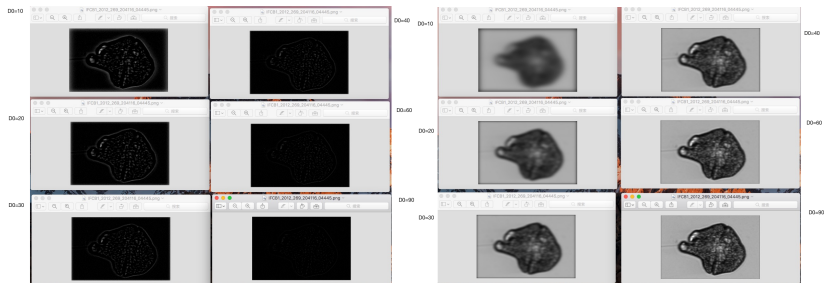
# Architecture of Neural Network



- Convolutional Neural Network

- 3 channels (share same label)

- Pyramid fully connected structure

vision@OUC

# Experiments Results

| Models | Accuracy |
|--------|----------|
| AlexNet trained on origin images | 93.58% |
| AlexNet trained on 3 channels images | 94.21% |

Table: Experiments Results of Plankton Classification

vision@OUC

Thanks for your attention !

vision@OUC

# Q & A

vision@OUC