

# Emotion challenge fact sheet

iCV

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## 1 Team details

- ZZXP
- Zhipeng Yu
- (Beijing University of post and telecommunication)BUPT.Beijing.China  
18810541615 penpen@bupt.edu.cn
- Jinagqi Zhang,Xuankun Huang,Yu Zhao
- Team website URL (if any)
- Affiliation

## 2 Contribution details

- Title of the contribution
- 87.5000
- inception V3 + centloss
- Rethinking the Inception Architecture for Computer Vision,Christian Szegedy,  
Vincent Vanhoucke, Sergey Ioffe, Jonathon Shlens, Zbigniew Wojna
- Representative image / diagram of the method
- Face Detection with opencv.

## 3 Face Landmarks Detection

### 3.1 Features / Data representation

none

### **3.2 Dimensionality reduction**

none

### **3.3 Compositional model**

none

### **3.4 Learning strategy**

none

### **3.5 Other techniques**

none

### **3.6 Method complexity**

none

## **4 Dominant emotion recognition**

### **4.1 Features / Data representation**

Describe features used or data representation model FOR DOMINANT EMOTION RECOGNITION (if any) traditional softmax function with auxiliary centloss, we used the 50 output of last innerproduct layer to represent the probability of emotion class. while the max of the output will be chosen as the final answer

### **4.2 Dimensionality reduction**

none

### **4.3 Compositional model**

onec fow now,we will add the res and VGG model foe test data

### **4.4 Learning strategy**

CNN + back propagate

### **4.5 Other techniques**

none

#### **4.6 Method complexity**

parameter count: 22,637,833 calculate amount:2.6 billion

### **5 Complementary emotion recognition**

#### **5.1 Features / Data representation**

none

#### **5.2 Dimensionality reduction**

none

#### **5.3 Compositional model**

none

#### **5.4 Learning strategy**

none

#### **5.5 Other techniques**

none

#### **5.6 Method complexity**

none

### **6 Joint dominant and complementary emotion recognition**

#### **6.1 Features / Data representation**

none

#### **6.2 Dimensionality reduction**

none

#### **6.3 Compositional model**

none

## 6.4 Learning strategy

none

## 6.5 Other techniques

none

## 6.6 Method complexity

none

# 7 Global Method Description

- Total method complexity: parameter count: 22,637,833 calculate amount:2.6 billion
- none(for any stage, if any)
- none (at any stage, if any)
- Qualitative advantages of the proposed solution
- Results of the comparison to other approaches (if any)
- Novelty degree of the solution and if is has been previously published

# 8 Other details

- Language and implementation details (including platform, memory, parallelization requirements) caffe C++ Linux centos 7.2 4\*Nvidia1080 GPU
- Detailed list of prerequisites for compilation
- Human effort required for implementation, training and validation? check accuracy of face detection
- Training/testing expended time? training time: 1day20hours test time: 80ms/per image
- General comments and impressions of the challenge? sorry about that I'am so busy this month. I will make more progress in the test level.