

- 1) 他们的成绩如何? 有些组有了多种不同的visual, audio feature, 技术报告里有没有提到哪些特征是最好的?
- 2) 2014年的winning systems都有哪些? 它们用的feature是什么?
- 3) 2013年和2014年用的分类模型是什么?

Mediaeval 2013:

data: a set of 25 Hollywood movies(18 for train, 7 for test)

training set (total duration 35h18)

test set (total duration 14h 44)

Mediaeval 2014:

Main task:

data: a set of 31 Hollywood movies(24 for train, 7 for test)

Generalization task:

86 videos from YouTube(total duration ca. 157 minutes)

2014 winning systems:

Fudan(MAP:0.63)

features:

video: improved dense trajectories (IDT)(histograms of oriented gradients (HOG), histograms of optical flow (HOF), motion boundary histograms (MBH) and trajectory shape (TrajShape) descriptors)

audio: MFCC

classifier: SVM, DNN

best result: MAP2014 0.63

feature of best run: did not use FV encoding of the HOG, HOF and MBH features

NIT-UIT(MAP:0.56)

video:

image feature: SIFT-based features(standard SIFT descriptor, Opponent-SIFT, Color-SIFT)

Motion feature: Improved Trajectories(A combination of Histogram of Oriented Gradients (HOG), Histogram of Optical Flow (HOF) and Motion Boundary Histogram (MBH) is used to describe each trajectory)

audio: MFCC

classifier: LibSVM

best result: MAP2014 0.56

feature of best run: best still image feature and fuse it with motion and audio features

TUB-IRML(MAP:0.52)

video:

motion descriptors Violent Flow (ViF)

Mid-level visual representations: histogram of oriented gradient (HoG) and histogram of oriented optical flow (HoF) features

audio:MFCC

classifier:2 class SVMs

best result:MAP2014 0.517

feature of best result:mid-level audio representation based on MFCC

FAR(MAP:0.45)

visual:Color Naming Histogram, Color Moments, Local Binary Patterns, Color Structure Descriptor, and Gray Level Run Length Matrix

audio:amplitude envelop, root- mean-square energy, zero-crossing rate, band energy ration, spectral centroid, spectral flux, bandwidth, and Mel-frequency cepstral coefficients

classifier:multi-layer perceptrons

best result:MAP2014 0.45

feature of best result: audio-only

MIC(MAP 0.446)

video:

salient trajectories(Histogram of Oriented Gradient (HOG), Histogram of Optical Flow (HOF) and Motion Boundary Histogram (MBH))

dense SIFT

audio:MFCC

classifier:linear libSVM

best result:0.446

feature of best result: double fusion of HOG,HOF,MBH, Dense SIFT, MFCC

