Paper1 Aggressive Action Estimation: A Comprehensive Review on Neural Network Based Human Segmentation and Action Recognition

Abstraction: 是篇综述

子问题

frame segmentation 帧图像分割

spatial and temporal feature extraction, 时空特征提取

motion modeling 运动建模

action classification 行为分类

CapsNet 蛮好

解释：

<https://blog.csdn.net/sunlianglong/article/details/80412304>

introduction

过时的数据集

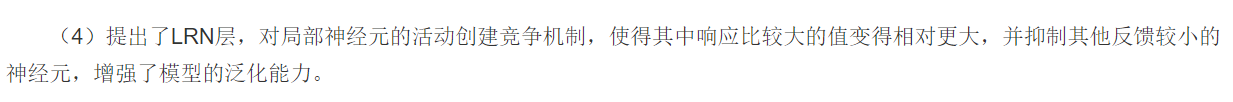
KTH and Weizmann dataset

古老的模型：

usage of hard-coded techniques such as MoSIFT, Optical Flow and Dense Trajectory.

成功的模型:

AlexNet(特定参数的CNN) (百度)



CNN+RNN

Two-stream networks and 3D-CNN

Two-stream: independently calculates spatial and temporal features.

CapsNet！！！棒！！

3. Core background

Feature extraction:

物体检测

光流

hard-coded 提取器 （这个额emm）

使用加速度信息

Markov Random Field

fully convolutional DenseNet （CNN的变体）

结构（<https://blog.csdn.net/zhangjunhit/article/details/77334202>）

ResNet

<https://blog.csdn.net/briblue/article/details/83544381>

Bag-of-Words technique

SIFT features（hard-coded 提取器）

exclusive and memory cell and forget gate (RNN 变体 )（就是LSTM）