Tianwei Lin

TEL: +86 18818272373
E-mail: wzmsltw@sjtu.edu.cn
Address: 800 Dongchuan R.D., Shanghai
Blog: https://zhuanlan.zhihu.com/wzmsltw

Education

M.E. Pattern Recognition and Artificial Intelligence *2016-Present*
Shanghai Jiao Tong University , Shanghai, P.R. China.

B.E. Mechanical Engineering & Automation *2012-2016*
Shanghai Jiao Tong University , Shanghai, P.R. China.

Research Interests

Machine Learning, Computer Vision, Artificial Intelligence, Video Analysis

Projects

1. **Traffic Gestures Recognition by Deep Learning**
   Human action recognition is a very energetic area in computer vision field, with a great potential in practical applications. In this project, we mainly focus on police gesture recognition task, which can be used as an important part of automatic driving system. We mainly propose two algorithms based on optical flow and pose estimation separately. This is a cooperation project with **BMW, ConnectedDrive Lab, China**.
2. **Face Spoofing Detection by Binocular Depth and Texture Features**
   Recently, face spoofing detection develops into a deeply concerned research topic since human face information is widely used in many areas such as online payment. In this project, we propose two novel and robust features for anti-spoofing: depth feature based on binocular camera images and spatial pyramid texture feature. This is a cooperation project with **CloudWalk Technology, China**.

Publications

[1] **T. Lin**, X. Zhao, Z. Shou. Single Shot Temporal Action Detection. ACM Multimedia (**ACMMM**). 2017.
[2] **T. Lin**, X. Zhao, Z. Fan. Temporal Action Localization with Two-Stream Segment-based RNN. IEEE International Conference on Image Processing (**ICIP**). 2017.
[3] X. Song, X. Zhao, **T. Lin**. Face Spoofing Detection by Fusing Binocular Depth and Spatial Pyramid Coding Micro-Texture Features. IEEE International Conference on Image Processing (**ICIP**). 2017.
[4] Z. Fan, **T. Lin**, X. Zhao, et.al. An Online Approach for Gesture Recognition toward Real-World Applications. The 9th International Conference on Image and Graphics (**ICIG**). 2017.

Skills

Coding: Python, C++, Matlab

Library: OpenCV, Caffe, Tensorflow, scikit-learn

Platform: Windows, Linux

Awards and Honors

Outstanding Graduate Student of Shanghai City *2016*
National Scholarship *2013*