Shugao Ma

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EDUCATION

Boston University, Boston, MA, USA
Ph.D, Computer Science, May 2016

Chinese Academy of Sciences, Beijing, China
Master of Engineering, Computer Applied Technology, July 2009

Fudan University, Shanghai, China
Bachelor of Engineering , Software Engineering, July 2006

WORK
EXPERIENCE

Facebook, Pittsburgh, PA, USA
Research Scientist   June, 2016 - present
Working with other world class scientists and the engineering team on high fidelity modeling of human behavior and appearance for the purpose of photo-realistic reconstruction of human interactions in VR/AR in the Facebook Reality Labs Pittsburgh.

Disney Research, Pittsburgh, PA, USA
Intern   June, 2015 - Sep., 2015
Designed and implemented a deep learning architecture for activity detection that combines Convolutional Neural Network and Recurrent Neural Network. Our method achieved much higher activity detection performance than the most recently reported results on a large scale dataset ActivityNet. The work is published in CVPR 2016.

Disney Research, Pittsburgh, PA, USA
Intern   February, 2014 - June, 2014
Proposed a new effective approach for automatic human action and interaction recognition in sports videos and TV program videos. In this approach, spatial, temporal and hierarchical structures in human actions are learned from video data and utilized to construct action classifiers. This work is published in CVPR 2015.

Google, Mountain View, CA, USA
Intern   May, 2013 - August, 2013
Designed and implemented a system for predicting users video advertising intention on YouTube using large scale machine learning methods. The main challenge addressed is finding relevant data for the prediction task by analyzing large amount of YouTube data, as well as constructing an efficient large scale machine learning system that achieves good prediction accuracy.

Microsoft, Beijing, China
Intern   May, 2007 - August, 2007
Designed and implemented an automatic video perception quality assessment system. The main challenge is to study what visual and acoustic features are most relevant to the perception quality of videos. Based on these features, a effective machine learning system is designed and implemented to automatically score the videos.

SELECTED
REFEREED
PUBLICATIONS

Gilwoo Lee, Zhiwei Deng, Shugao Ma, Takaaki Shiratori, Siddhartha S Srinivasa, Yaser Sheikh. *Talking With Hands 16.2 M: A Large-Scale Dataset of Synchronized Body-Finger Motion and Audio for Conversational Motion Analysis and Synthesis*. In ICCV 2019.

Chaitanya Ahuja, Shugao Ma, Louis-Philippe Morency, Yaser Sheikh. *To React or not

to React: End-to-End Visual Pose Forecasting for Personalized Avatar during Dyadic Conversations. In ICMI 2019.

Aayush Bansal, Shugao Ma, Deva Ramanan, Yaser Sheikh. *Recycle-gan: Unsupervised video retargeting.* In ECCV 2018.

Shugao Ma, Jianming Zhang, Nazli Ikizler-Cinbis , Leonid Sigal, Stan Sclaroff. *Space-time tree ensemble for action recognition.* IJCV, 2017.

Jianming Zhang, Shugao Ma, Mehrnoosh Sameki, Stan Sclaroff, Margrit Betke, Zhe L. Lin, Xiaohui Shen, Brian L. Price, Radomr Mech. *Salient object subitizing.* IJCV, 2017.

Shugao Ma, Sarah Adel Bargal, Jianming Zhang, Leonid Sigal, Stan Sclaroff. *Do less and achieve more: training CNNs for action recognition utilizing action images from the web.* Pattern Recognition, 2017.

Shugao Ma, Leonid Sigal, Stan Sclaroff. *Learning activity progression in lstms for activity detection and early detection.* In CVPR, 2016.

Shugao Ma, Leonid Sigal, Stan Sclaroff. *Space-time tree ensemble for action recognition.* In CVPR, 2015.

Jianming Zhang, Shugao Ma, Mehrnoosh Sameki, Stan Sclaroff, Margrit Betke, Zhe L. Lin, Xiaohui Shen, Brian L. Price, Radomr Mech. *Salient object subitizing.* In CVPR, 2015.

Jianming Zhang, Shugao Ma, Stan Sclaroff. *MEEM: robust tracking via multiple experts using entropy minimization.* In ECCV, 2014.

Shugao Ma, Jianming Zhang, Nazli Ikizler-Cinbis, Stan Sclaroff. *Action recognition and localization by hierarchical space-time segments.* In ICCV, 2013.

Shugao Ma, Stan Sclaroff, Nazli Ikizler-Cinbis. *Unsupervised learning of discriminative relative visual attributes.* In ECCV Workshops, 2012.

TECHNIQUE EXPERTIES

Computer Vision
Familiar with many computer vision techniques, particularly experienced in human action recognition and detection in videos.

Machine Learning
Familiar with many machine learning models, and extensively used Deep Learning techniques especially recurrent neural networks in recent years using PytTorch, Torch and Caffe.