

Yanwei Fu ¹

Post-doc Researcher of Disney Research

Mobile: 412-592-1835

Email: yanwei.fu@disneyresearch.com

y.fu@qmul.ac.uk

EDUCATION *Ph.D. in Computer Science, Computer Vision* 09/2011 – 11/2014
Queen Mary University of London,
Supervisors: Prof. *Tao Xiang* and Prof. *Shaogang Gong*.

M.S. Computer Science, 09/2008 – 06/2011
Department of Computer Science and Technology, Nanjing University,
Supervisor: Prof. *Yanwen Guo*.

ACADEMIC POSITIONS *Pre-tenure Associate Professor at the School of Data Science (SDS),*
Fudan University, China 07/2016 – NOW
Collaborators: Prof. Jianqing Fan, Prof Xiangyang Xue, Prof. Yu-gang Jiang

Post-doctoral Researcher at Disney Research Pittsburgh,
Affiliated/Collaboration with Carnegie Mellon University (CMU) 12/2014 – 07/2016
Collaborator: Dr. Leonid Sigal.

- PUBLICATIONS**
1. *Video Emotion Recognition with Transferred Deep Feature Encodings*, Baohan Xu, **Yanwei Fu**, Yu-Gang Jiang, Boyang Li and Leonid Sigal ICMR 2016 (**Oral**) (accept rate=18%)
 2. *Heterogeneous Knowledge Transfer in Video Emotion Recognition, Attribution and Summarization*, Baohan Xu, **Yanwei Fu**, Yu-Gang Jiang, Boyang Li and Leonid Sigal (in major revision of IEEE Transactions on Affective Computing.)
 3. *Harnessing Object and Scene Semantics for Large-Scale Video Understanding*. ZuXuan Wu, **Yanwei Fu**, Yu-gang Jiang, Leonid Sigal (**Spotlight**) CVPR 2016.
 4. *Semi-supervised Vocabulary-informed Learning*. **Yanwei Fu** and Leonid Sigal, CVPR 2016. (**Oral**) (Disney had applied the patent for this work.)
 5. *Learning to Generate Posters of Scientific Papers*, Yu-ting Qiang, **Yanwei Fu**, Yanwen Guo, Zhi-hua Zhou and Leonid Sigal. *AAAI 2016*.
 6. *Robust Subjective Visual Property Prediction from Crowdsourced Pairwise Labels*. **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang, Jiechao Xiong, Shaogang Gong, Yizhou Wang and Yuan Yao *IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)*, March 2016, **impact factor: 6.077**.

¹<http://yanweifu.github.io/>

7. *Transductive Multi-view Zero-Shot Learning*. **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong *IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI) 2015 Nov*, **impact factor: 6.077**.
8. *Learning from Synthetic Data Using a Stacked Multichannel Autoencoder*, Xi Zhang, **Yanwei Fu**, Shanshan Jiang, Leonid Sigal and Gady Agam, *ICMLA 2015*.
9. *Learning Multi-modal Latent Attributes*, **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong. *IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI)*, 2014. **impact factor: 6.077**
10. *Interestingness Prediction by Robust Learning to Rank*. **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong and Yuan Yao. *European Conference on Computer Vision - ECCV 2014*.
11. *Transductive Multi-view Embedding for Zero-Shot Recognition and Annotation*. **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong *European Conference on Computer Vision - ECCV 2014*.
12. *Transductive Multi-class and Multi-label Zero-shot Learning* **Yanwei Fu**, Yongxin Yang, Timothy M. Hospedales, Tao Xiang and Shaogang Gong. *European Conference on Computer Vision - ECCV 2014 workshop on Parts and Attribute*.
13. *Transductive Multi-label Zero-shot Learning*. **Yanwei Fu**, Yongxin Yang, Timothy M. Hospedales, Tao Xiang and Shaogang Gong. *British Machine Vision Conference – BMVC 2014 (Oral)*.
14. *Attribute Learning for Understanding Unstructured Social Activity*, **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong. *European Conference on Computer Vision - ECCV 2012*.
15. *Content-sensitive collection snapping*, **Yanwei Fu**, Yanwen Guo *IEEE International Conference on Multimedia and Expo – ICME 2011*.
16. *Multi-view Video Summarization*, **Yanwei Fu**, Yanwen Guo, Yanshu Zhu, Feng Liu, Chuanming Song and Zhi-Hua Zhou, *IEEE Transactions on Multimedia (TMM)*, 2010. *ProjectPage*.
Remark: *This work is strongly recommended by the review journal of Multimedia communications technical committee — IEEE COMMUNICATIONS SOCIETY – IEEE MMTC R-LETTER(p13). IEEE MMTC R-LETTER is one of the two review journals in IEEE communication society. For more details, please watch the Demo.*

TECHNICAL REPORTS

1. *Multi-view Metric Learning for Multi-view Video Summarization*, **Yanwei Fu**
2. *Queen Mary University of London TRECVID-2013 Multimedia Event Detection (MED) System Report*, **Yanwei Fu**, Timothy M. Hospedales, Tao Xiang and Shaogang Gong. *TRECVID MED 2013 workshop notebook paper*.
3. *Robust Classification by Pre-conditioned LASSO and Transductive Diffusion Component Analysis*, **Yanwei Fu**, Leonid Sigal, submitted to ICLR 2016: <http://arxiv.org/abs/1511.06340>.

ACADEMIC EXPERIENCE

2012.07 – 2012.08 *Visiting the school of EECS and Math, Peking University.*
Host: Prof. Yuan Yao and Prof. Yi-Zhou Wang.

2013.07 – 2013.08 *IPAM Graduate Summer School: Computer Vision, UCLA.*
Host: Prof. Alan L. Yuille.

2014.08 – 2014.09 *Autonomous learning summer school, Max Planck Institute for Mathematics in the Sciences, Leipzig Germany.*
Host: Prof. Nihat Ay, and Prof. Marc Toussaint.

SELECTED PROJECTS

I participated the following projects,

1. *International Exchanges Scheme with Peking University, China, funded by Royal Society UK. 2011 – 2013,*

This was a joint project collaborated with Prof. Yuan Yao from Peking University. It focused on visual abnormal behaviour, Hodgerank, and Robust learning to rank. I was in charge of this project. My work on this project had contributed to two of my publications – Robust Estimation of Subjective Visual Properties (TPAMI) and Interestingness Prediction by Robust Learning to Rank (ECCV 2014).

2. *Research on the Key Techniques of Video summarization, Natural Science Foundation of Jiangsu Province (BK2009081), 2009 – 2011,*

The project aimed at the study of video summarization of surveillance videos. I was the main contributor of this project. And my work on this project led to one of my publications – Multi-view Video Summarization, IEEE TMM2010. This paper was strongly recommended by the review journal – IEEE MMTC R-LETTER. I also had one technical report: Multi-view Metric Learning for Multi-view Video Summarization.

HONOURS

1. *National Scholarship for Outstanding Self-Funded Foreign Students, 2014.*
I'm one of the total 30 winners in UK.
2. *Fully funding College scholarship in Queen Mary University of London, 2011-2014*
I am the only winner from EECS, Queen Mary.
3. *Best master thesis award of Jiangsu Province, 2012.*
I am the only winner from compute science in Jiangsu Province, China.
4. *BEST THESIS AWARD of Computer Science Department in Nanjing University, 2011.*
I am one of the three winners.
5. **Google** *Excellent Student Scholarship, 2011 (Top 1%).*
6. **Huawei** *Student Scholarship, 2010 (Top 1%).*
7. *“Innovtional and enterprising talents, 2014 KunShan City”.*
I am the youngest winner of this award since it is ever made.

SUPERVISED STUDENTS

ZuXuan Wu, an intern in Disney Research Pittsburgh (Sep. 2015 – Jan. 2016), co-supervised with Leonid Sigal. We are working on a project of large-scale video action recognition by deep learning algorithms. Zuxuan Wu is a Third-year Master Student in CS department of Fudan University. We have one co-author paper published in CVPR 2016.

Baohan Xu, a Master student in Compute Science Department, Fudan University (Nov. 2014 – Now),

co-supervised with Yu-Gang Jiang. We are working on an emotion recognition problem. We have one paper submitted to IEEE Transaction on Affective Computing; and one paper is submitted to ICMR 2016.

Yu-Ting Qiang, a Master student in Compute Science Department, Nanjing University (May. 2015 – Now),
co-supervised with Yanwen Guo. We are working on automatically generating posters from scientific papers. We have one co-author paper published in AAAI 2016.

**TEACHING
EXPERIENCES**

2009.01 – 2009.06 Operating Systems, Nanjing University;
2012.01 – 2012.06 TA for Fundamentals of Web Technology (DCS150), QMUL;
2012.09 – 2012.12 TA for C++ for Image Processing (DCS339/AMCM053), QMUL;
2013.01 – 2013.06 TA for Fundamentals of Web Technology (ECS417U), QMUL;
2014.01 – 2014.06 TA for Fundamentals of Web Technology (ECS417U), QMUL;

**ACADEMIC
SERVICES**

IEEE STUDENT MEMBER
The Journal Reviewer for

- IEEE Transactions on multimedia (TMM) (starting from 2011);
- IEEE transactions on human-machine systems (starting from 2012);
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT) (starting from 2013);
- Journal of Visual Communication and Image Representation (JVCI) (starting from 2015);
- IET Image Processing (starting from 2012);
- IET Computer Vision (starting from 2014);
- Neurocomputing (starting from 2012);
- Advanced Robotics (starting from 2015);
- Signal processing image communication (starting from 2015);
- Computer Vision and Image Understanding (CVIU) (starting from 2015);
- Advanced Robotics (starting from 2014);

**PATENTS
PENDING IN
DISNEY**

Yanwei Fu, Leonid Sigal, System and method of vocabulary-informed categorization of items of interest included within digital information, Walt-Disney Corp.
Yanwei Fu, Leonid Sigal, Robust Classification by Pre-conditioned LASSO , Walt-Disney Corp.