



# Xiaoshan Yang

---

## Work Experiences

- **2018.11–Present, Associate Researcher**  
*National Lab of Pattern Recognition, Institute of Automation (CASIA), Chinese Academy of Sciences, Beijing, China*
- **2016.07–2018.10, Assistant Researcher**  
*National Lab of Pattern Recognition, Institute of Automation (CASIA), Chinese Academy of Sciences, Beijing, China*
- **2013.09–2014.04, Algorithm Engineer**  
*China-Singapore Institute of Digital Media (CSIDM), Singapore*
- **2012.06–2012.09, Algorithm Engineer**  
*NEC Laboratories, Beijing, China*

## Education

- **2012.09–2016.07, Ph.D. in Pattern Recognition and Intelligent System**  
*National Lab of Pattern Recognition, Institute of Automation (CASIA), Chinese Academy of Sciences*
- **2009.09–2012.03, Master in Computer Science**  
*Beijing Institute of Technology (BIT)*
- **2005.09–2009.07, Bachelor in Maths and Applied Maths**  
*North China University of Technology (NCUT), Rank – 1/70*

## Research Interests

- **Multimedia & Computer Vision:** *Image/Video Analysis, Social Event Analysis*
- **Pattern Recognition & Machine Learning:** *Sparse Coding, Deep Learning*

## Publications

- **Xiaoshan Yang, Changsheng Xu:** Image Captioning by Asking Questions. **ACM Transactions on Multimedia Computing, Communications and Applications:** (2019)

- Junyu Gao, Tianzhu Zhang, **Xiaoshan Yang**, Changsheng Xu: P2T: Part-to-Target Tracking via Deep Regression Learning. **IEEE Trans. Image Processing** 27(6): 3074-3086 (2018)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Deep-Structured Event Modeling for User-Generated Photos. **IEEE Trans. Multimedia** 20(8): 2100-2113 (2018)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Text2Video: An End-to-end Learning Framework for Expressing Text With Videos. **IEEE Trans. Multimedia** 20(9): 2360-2370 (2018)
- Yifan Jiao, Zhetao Li, Shucheng Huang, **Xiaoshan Yang**, Bin Liu, Tianzhu Zhang: Three-Dimensional Attention-Based Deep Ranking Model for Video Highlight Detection. **IEEE Trans. Multimedia** 20(10): 2693-2705 (2018)
- Yikun Sheng, **Xiaoshan Yang**, Changsheng Xu: A Standalone Demo for Quiz Game "Describe and Guess". **MIPR 2018**: 206-207
- Yikun Sheng, **Xiaoshan Yang**, Xueliang Liu, Changsheng Xu: Attribute-Assisted Domain Transfer from Image to Sketch. **MIPR 2018**: 287-292
- Fan Qi, **Xiaoshan Yang**, Changsheng Xu: A Unified Framework for Multimodal Domain Adaptation. **ACM Multimedia 2018**: 429-437
- Junyu Gao, Tianzhu Zhang, **Xiaoshan Yang**, Changsheng Xu: Deep Relative Tracking. **IEEE Trans. Image Processing** 26(4): 1845-1858 (2017)
- Yifan Jiao, **Xiaoshan Yang**, Tianzhu Zhang, Shucheng Huang, Changsheng Xu: Video Highlight Detection via Deep Ranking Modeling. **PSIVT 2017**: 28-39
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu, Shuicheng Yan, M. Shamim Hossain, Ahmed Ghoneim: Deep Relative Attributes. **IEEE Trans. Multimedia** 18(9): 1832-1842 (2016)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Semantic Feature Mining for Video Event Understanding. **TOMCCAP** 12(4): 55:1-55:22 (2016)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Abnormal Event Discovery in User Generated Photos. **ACM Multimedia 2016**: 47-51
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: A new discriminative coding method for image classification. **Multimedia System** 21(2): 133-145 (2015)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Cross-Domain Feature Learning in Multimedia. **IEEE Trans. Multimedia** 17(1): 64-78 (2015)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu, M. Shamim Hossain: Automatic Visual Concept Learning for Social Event Understanding. **IEEE Trans. Multimedia** 17(3): 346-358 (2015)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu, Ming-Hsuan Yang: Boosted Multifeature Learning for Cross-Domain Transfer. **TOMCCAP** 11(3): 35:1-35:18 (2015)
- Jianbing Shen, **Xiaoshan Yang**, Xuelong Li, Yunde Jia: Intrinsic Image Decomposition Using Optimization and User Scribbles. **IEEE Trans. Cybernetics** 43(2): 425-436 (2013)
- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu: Locality discriminative coding for image classification. **ICIMCS 2013**: 52-55

- **Xiaoshan Yang**, Tianzhu Zhang, Changsheng Xu, Min Xu: Graph-Guided Fusion Penalty Based Sparse Coding for Image Classification. **PCM 2013**: 475-484
- Jianbing Shen, **Xiaoshan Yang**, Yunde Jia, Xuelong Li: Intrinsic images using optimization. **CVPR 2011**: 3481-3487

---

## Projects

- **Youth Fund of NSFC**: Knowledge-driven Video Understanding and Analysis
- **Research Program of NLPR**: Knowledge-driven Adversarial Video Generation
- **CCF-Tencent Open Fund**: Highlight Detection
- **Cooperation Project of Migu**: AI Cloud Service for Video Annotation
- **International Collaboration Project of NSFC**: Personalized Health Management Based on Real-time Behavioral Data

---

## Awards

- 2018, Best Patent Award, CCF-Tencent Open Fund
- 2017, Best Paper Award, ChinaMM
- 2017, Excellent Doctoral Dissertation of Chinese Academy of Sciences
- 2016, President Scholarship of Chinese Academy of Sciences

---

## Services

- ACM Multimedia 2018/2019 PC member
- Journal/Conference Reviewer: IEEE TMM, ACM TIST, ACM TOMM, Neuro-computing, MTAP and ACM MM