Guan'an Wang (王贯安)

E-mail: guan.wang0706@gmail.com

Tel: (+86)15501266509 **WeChat:** WGA568930104

Homepage: https://wangguanan.github.io/

Interests:

Computer Vision, Pattern Recognition

Person Re-Identification, Hashing (Fast Image Retrieval), GAN

EDUCATIONS

◆ **2015.09 – 2021.06:** Ph.D. Degree

Supervisor: Prof. Zeng-Guang Hou (IEEE Fellow), Prof. Jian Cheng

University: **Institute of Automation, Chinese Academy of Sciences (CAISA)**, Beijing, China.

Publications: **25 papers, 13/24** published, **8 published as 1st author** (all CV top conf./journal, including CVPR, ICCV, ECCV*2, AAAI, IJCAI, TNNLS<SCI>, NN<SCI>)

Open Resources: **6 repos, 2 toolbox**, Github **followers 200+, stars 2.5k+**

◆ **2019.09 – 2020.09:** Visiting Scholar

Supervisor: Prof. Shaogang Gong (IET Fellow)

University: **Queen Mary University of London (QMUL)**, London, UK.

◆ **2011.09 - 2015.06:** Bachelor Degree

University: School of Information Science and Engineer, **Central South University (CSU)**, Hunan, China.

Ranking 1st/180+, 2014.10 enrolled to CASIA without entrance examination

PUBLICATIONS (13)

◆ **Guan'an Wang,** Xiaoliang Xie, Qinghao Hu, Yang Yang, Jian Cheng, Zeng-Guang Hou. "Adversarial Binary Mutual Learning for Semi-Supervised Deep Hashing". *IEEE Transactions on Neural Networks and Learning Systems*, 2021. (**TNNLS, JCR-1, IF=8.793**)

◆ **Guan'an Wang***, Yang Yang*, Tianzhu Zhang, Jian Cheng, Zengguang Hou, Prayag Tiwari, Hari Mohan Mohan Pandey. "Cross-Modality Paired-Images Generation and Augmentation for RGB-Infrared Person Re-Identification". *Neural Networks*, Volume 128, pp. 294-304, 2020. (**JCR-2, IF=8.03**)

◆ **Guan'an Wang,** Shaogang Gong, Jian Cheng, Zengguang Hou. "Faster Person Re-Identification". *In Proceedings of the 16th European Conference on Computer Vision*, Glasgow, UK, pp. 275-292, August 2020. (**ECCV, CCF-B, Top3 Confs. on CV**)

◆ **Guan'an Wang***, Shuo Yang*, Huanyu Liu, Zhicheng Wang, Yang Yang, Shuliang Wang, Gang Yu, Erjin Zhou, Jian Sun. "High-Order Information Matters: Learning Relation and Topology for Occluded Person Re-Identification". *In Proceedings of the 2020 Conference on Computer Vision and Pattern Recognition*, Seattle, WA, USA, pp. 6448-6457, June 2020. (*equal contribution, **CVPR, CCF-A**)

◆ **Guan'an Wang**, Tianzhu Zhang, Yang Yang, Jian Cheng, Jianlong Chang, Xu Liang, Zengguang Hou. "Cross-Modality Paired-Images Generation for RGB-Infrared Person Re-Identification". *In Proceedings of the 34th AAAI Conference on Artificial Intelligence*, New York, USA, pp. 12144-151, 2020. (**AAAI, CCF-A**)

- **Guan'an Wang**, Tianzhu Zhang, Jian Cheng, Si Liu, Yang Yang, Zengguang Hou. "RGB-Infrared Cross-Modality Person Re-Identification via Joint Pixel and Feature Alignment". *In Proceedings of the 17th International Conference on Computer Vision*, Seoul, Korea (South), pp. 3622-31, 2019. (**ICCV, CCF-A**)

- **Guan'an Wang**, Yang Yang, Jian Cheng, Jinqiao Wang, Zengguang Hou. "Color-Sensitive Person Re-Identification". *In Proceedings of the 28th International Joint Conference on Artificial Intelligence*, Macao, China, pp. 933-939, 2019. (**IJCAI, CCF-A**)

- **Guan'an Wang**, Qinghao Hu, Jian Cheng, Zengguang Hou. "Semi-Supervised Generative Adversarial Hashing for Image Retrieval." *In Proceedings of the European Conference on Computer Vision*, Munich, Germany, pp. 491-507, 2018. (**ECCV, CCF-B, Top3 Confs. on CV**)

- Zhen-Liang Ni, Gui-Bin Bian, **Guan'an Wang**, Xiaohu Zhou, Zeng-Guang Hou, Hua-Bin Chen, Xiao-Liang Xie. "Pyramid Attention Aggregation Network for Semantic Segmentation of Surgical Instruments". *In Proceedings of the 34th AAAI Conference on Artificial Intelligence*, New York City, USA, pp. 11782-790, 2020. (**AAAI, CCF-A**)

- Zhen-Liang Ni, Gui-Bin Bian, **Guan'an Wang**, Xiaohu Zhou, Zeng-Guang Hou, Xiao-Liang Xie, Zhen Li, Yu-Han Wang. "BARNet: Bilinear Attention Network with Adaptive Receptive Field for Surgical Instrument Segmentation". *In Proceedings of the 29th International Joint Conference on Artificial Intelligence, Yokohama*, Japan, pp. 832-838, 2021. (**IJCAI, CCF-A**)

- **Z**hengxiong Luo, Zhicheng Wang, Yuanhao Cai, **Guan'an Wang**, Liang Wang, Yan Huang, Erjin Zhou, Tieniu Tan, Jian Sun. "Efficient Human Pose Estimation by Learning Deeply Aggregated Representations". IEEE International Conference on Multimedia and Expo, Shenzhen, China, May 2021. (**ICME, CCF-B**)

- Gehan Hao, Yang Yang, Xue Zhou, **Guan'an Wang**, Zhen Lei. "Horizontal Flipping Assisted Disentangled Feature Learning for Semi-Supervised Person Re-Identification". *In Proceedings of the 15th Asian Conference on Computer Vision*, Japan, pp. 21-37, November 2020. (**ACCV, CCF-C**)

- Chen-Chen Fan, Haiqun Xie, Hongjun Yang, ZhenLiang Ni, Zeng-Guang Hou, **Guan'an Wang**, Sheng Chen, Zhijie Fang, Shuyun Huang. "Group Feature Learning and Domain Adversarial Neural Network for aMCI Diagnosis System Based on EEG". *In Proceedings of the 2021 IEEE International Conference on Robotics and Automation*, Xi'an, China, May 2021. (**ICRA, CCF-B, Top3 Confs. on Robotic**)

UNDERREVIEWS (12)

- "Graph Zero-Shot Hashing". (1st author)
- "Meta Person Re-Identification: Efficient Reduction, Flexible Distillation and Interpreterability". (1st author)
- "Pixel and Feature transfer Fusion for Unsupervised Cross-Dataset Person Re-Identification". (1st author)
- "Morphological Analysis of Aneurysm with Boundary-Aware Features".
- "Learning Visibility Graph and Features Recovery Transformer for Occluded Person Re-identification".
- "Real-Time Morphological and Positional Analysis of Wire-Like Structures in DSA".
- "TR-GAN: Past-to-Future Prediction for MRI using Temporal Recurrent Generative Adversarial Network".
- "Adaptive Graph Reasoning and Semantic Guidance for Surgical Scene Understanding".
- "Efficient Human Pose Estimation by Learning Deeply Aggregated Representations".
- "GF-DANN: Group Feature Learning and Domain Adaption with Adversarial Neural Network for aMCI Diagnosis Based on EEG".
- "NLBNet: Adaptive Cross-Strip Non-Local Network with Low-Rank Bilinear Feature Fusion for Surgical Scene Understanding".

◆ "Learning Pyramid Attention and Deformation Features for Surgical Instrument Segmentation".

CHALLENGES & HONORS

◆ **1st(1/1500) of National Challenge of Artificial Intelligence (Re-ID Track),** 2020
◆ **Scholarship of State Scholarship Fund** to the UK awarded by China Scholarship Council, 2019
◆ **Outstanding Graduate** of Hunan Province, China 2015
◆ **Outstanding Graduate** of Center South University, 2015
◆ **Meritorious Winner** (<10%) in American College Student Mathematical Modeling Contest, 2014
◆ **First Prize** in Intelligent Vehicle Contest of Hunan Province, 2014
◆ **National Scholarship** (<5%), 2012，2014
◆ **School Principal Scholarship** (< 1%) in Center South University, 2012, 2013, 2014

ACTIVITIES

◆ **Conference Reviewers**
  ▪ NeurIPS2021, MM2021, IJCAI2021, CVPR2021, AAAI2021, ICCV2021,
  ▪ IJCAI2020, CVPR2020, AAAI2020, BMVC2020,
  ▪ ICCV2019, CVPR2019, AAAI2019
◆ **Journal Reviewers**
  ▪ International Journal of Computer Vision (IJCV)
  ▪ IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
  ▪ IEEE Transactions on Multimedia (TMM)
◆ **Invited Lecturer** of the GAN Theory and Practice in online deep learning course

SKILLS

◆ Programming: Python, Matlab, C, PyTorch, TensorFlow, Latex
◆ Research Tools: Pycharm, Viso, Word, PowerPoint