Guangyi Chen

Education

Department of Automation, Tsinghua University

Beijing, China 2016-present

PhD student in Computer Vision

Advisor: Prof. Jie Zhou

Assistant Advisor: Prof. Jiwen Lu

Department of Automation, Tsinghua University

B.E. in Automation

Beijing, China 2012-2016

Publications

Peer-Reviewed Conference Publications

- [1] Nuoxing Zhou, **Guangyi Chen**, Jinglin Xu, Weishi Zheng, and Jiwen Lu Temporal Label Aggregation for Unintentional Action Localization 2021 IEEE International Conference on Multimedia and Expo (**ICME**), 2021
- [2] **Guangyi Chen**, Yuhao Lu, Jiwen Lu, and Jie Zhou Deep Credible Metric Learning for Unsupervised Domain Adaptation Person Re-identification 16th European Conference on Computer Vision (**ECCV**), 2020
- [3] Guangyi Chen*, Yongming Rao*, Jiwen Lu, and Jie Zhou
 Temporal Coherence or Temporal Motion: Which is More Critical for Video-based Person Re-identification?
 16th European Conference on Computer Vision (ECCV), 2020
- [4] Guangyi Chen, Tianren Zhang, Jiwen Lu, and Jie Zhou Deep Meta Metric Learning IEEE International Conference on Computer Vision (ICCV), 2019
- [5] Guangyi Chen, Chunze Lin, Liangliang Ren, Jiwen Lu, and Jie Zhou Self-Critical Attention Learning for Person Re-identification IEEE International Conference on Computer Vision (ICCV), 2019
- [6] **Guangyi Chen**, Jiwen Lu, Jianjiang Feng and Jie Zhou Localized Multi-kernel Discriminative Canonical Correlation Analysis for Video-based Person Re-identification 2017 IEEE International Conference on Image Processing (**ICIP**), 2017

Peer-Reviewed Journal Publications

- [7] **Guangyi Chen**, Jiwen Lu, Ming Yang, and Jie Zhou Learning Recurrent 3D Attention for Video-based Person Re-identification IEEE Transactions on Image Processing (**TIP**, *IF*: 9.34), 2020
- [8] **Guangyi Chen**, Jiwen Lu, Ming Yang, and Jie Zhou Spatial-Temporal Attention-aware Learning for Video-based Person Re-identification IEEE Transactions on Image Processing (**TIP**, *IF*: 9.34), 2019

Projects

- Principal Investigator, "Pattern recognition and intelligent system", 2016-2018
 Develop algorithms to recognize individuals in surveillance videos
- Principal Investigator, "Deep metric learning for visual object recognition", 2017-2020
 Develop algorithms to enhance the robustness and generalizability of deep metric learning models
- Principal Investigator, "Human action recognition and analysis for service robots", 2019-2022
 Evaluate and further develop algorithms to analyze out-of-distribution human action videos
 Develop algorithms to analyze the human intention underlying the action videos

^{*} indicates equal contribution

- Principal Investigator, "Intelligent visual perception and reasoning", 2020-2021
 Develop algorithms by introducing the casual learning into visual perception system
- Principal Investigator, "Human-centered visual understanding in large-scale unconstrained scenes", 2020-2022

Develop algorithms to recognize individuals with clothing features in large-scale unconstrained scenes Develop algorithms to predict human trajectories in the crowd scenes

Co-advised students

- Tianren Zhang (2018-2019)
- Yuhao Lu (2019-2020)
- Weilin Huang (2019-2020)
- Junlong Li (2020-)
- Wenliang Zhao (2020-)
- Tianpei Gu (2020-)
- Nuoxing Zhou (2020-)
- Jinan Bao (2020-)

Awards

Jiang Zhen scholarship at Tsinghua University	2020
 2nd place in Semi-Supervised Recognition Challenge at FGVC7 	2020
 Friends of Tsinghua scholarship 	2019

Academic Services

Co-Organizer

Co-Organizer on The Third Workshop on Human Identification in Multimedia (HIM'19) at ICME 2019.

Journal Reviewer

- IEEE Transactions on Image Processing
- IEEE Transactions on Multimedia
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Access
- Pattern Recognition
- Pattern Recognition Letters
- Neuralcomputing
- Journal of Visual Communication and Image Representation

Conference Reviewer

- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR 2020, 2021)
- International Conference on Machine Learning (ICML 2021)
- International Joint Conference on Artificial Intelligence (IJCAI 2021)
- Neural Information Processing Systems (NeurIPS 2020)
- European Conference on Computer Vision (ECCV 2020)
- IEEE International Conference on Multimedia and Expo (ICME 2018, 2019, 2020)
- IEEE Winter Conference on Applications of Computer Vision (WACV 2020, 2021)
- International Conference on Pattern Recognition (ICPR 2018, 2019, 2020)
- IEEE International Conference on Image Processing (ICIP 2018, 2019, 2020)