Jiangliu Wang

I am a Postdoctoral Researcher at the CUHK T Stone Robotics Institute. My research interests include self-supervised representation learning, video understanding, multi-modal learning, and related applications on robotics.

Education

The Chinese University of Hong Kong

2015 - 2020

Ph.D. in Mechanical and Automation Engineering

Supported by Hong Kong PhD Fellowship Scheme (HKPFS)

Advisor: Yun-hui Liu

Nanjing University 2011 - 2015

B.Eng. in Control and Systems Engineering

Advisor: Wei Li

Selected Publications

1. *****************. Research on self-supervised audio-visual representation learning.

Jiangliu Wang, Jianbo Jiao, Haoang Li, Di Kang, and Yun-hui Liu Submitted to Neural Information Processing Systems (NeurIPS). 2021.

2. Self-supervised Video Representation Learning by Uncovering Spatio-temporal Statistics.

Jiangliu Wang*, Jianbo Jiao*, Linchao Bao, Shengfeng He, Wei Liu, and Yun-hui Liu.

Transactions on Pattern Analysis and Machine Intelligence (T-PAMI). 2021.

3. Self-Supervised Video Representation Learning by Pace Prediction.

Jiangliu Wang, Jianbo Jiao, and Yun-hui Liu

European Conference on Computer Vision (ECCV). 2020.

4. Contrastive Learning of Video Representations with Temporally Adversarial Examples.

Yibing Song, Tian Pan, Tianyu Yang, **Jiangliu Wang**, Chongjian Ge, Wenhao Jiang, and Wei Liu Submitted to Transactions on Pattern Analysis and Machine Intelligence (T-PAMI).

5. Self-supervised Spatio-temporal Representation Learning for Videos by Predicting Motion and Appearance statistics.

Jiangliu Wang, Jianbo Jiao, Linchao Bao, Shengfeng He, Yun-hui Liu and Wei Liu.

Computer Vision and Pattern Recognition (CVPR). 2019.

6. View-invariant human action recognition based on a 3d bio-constrained skeleton model.

Qiang Nie, Jiangliu Wang, Xin Wang, and Yun-hui Liu.

Transactions on Image Processing (TIP). 2019

7. Kinematics Features for 3D Action Recognition Using Two-Stream CNN.

Jiangliu Wang and Yunhui-Liu.

World Congress on Intelligent Control and Automation (WCICA). 2018.

8. Motion patterns and phase-transition of a defender–intruder problem and optimal interception strategy of the defender.

Jiangliu Wang and Wei Li.

Communications in Nonlinear Science and Numerical Simulation. 2015.

Tier 1 journal in applied mathematics.

Patent

1. Image coding method, action recognition method, and computer device.

Jiangliu Wang, Kebin Yuan, and Yun-hui Liu.

Patent WO2019120108A1.

Work Experience and Internships

Postdoctoral Researcher CUHK T Stone Robotics Institute Chinese University of Hong Kong (CUHK) Work on self-supervised representation learning Work on fine-grained video understanding for robotics	Oct. 2020 - Present
Research Intern at Tencent AI Lab Computer Vision Group, Tencent, Shenzhen Mentor: Linchao Bao and Wei Liu Worked on self-supervised video representation learning	May 2018 - May 2019
Research Assistant at CUHK Worked on video understanding and its applications on robotics Collaborated with HUAWEI Noah's Ark Lab on children caring robot Collaborated with KOKORO Co., Ltd. Japan on humanoid robot	July 2015 - Sept. 2020
Research Assistant at Nanjing University Department of Control and Systems Engineering Advisor: Wei Li Worked on defense–intrusion interaction optimization problem	Oct. 2013 - July 2014

Selected Awards

Hong Kong PhD Fellowship Scheme (HKPFS)	2015 - 2019
Excellent Undergraduate Student of NJU	2015
First-class Scholarship for Outstanding Students of NJU	2012-2014

Academic Services

Conference Reviewer: CVPR 2021, ICCV 2021, ICML 2021 Workshop on SSL, NeurIPS 2020 Workshop on SSL, ICRA 2020, IROS 2019.

Journal Reviewer: IEEE Transactions on Neural Networks and Learning Systems (TNNLS), IEEE Robotics and Automation Magazine (RAM).