刘婧媛 Jingyuan Liu

Computer vision and graphics

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Education

2017.9-now PhD candidate in Computer Science and Engineering

Hong Kong University of Science and Technology

Research interests: user interface design, modeling humans in videos

Supervisor: Professor Chiew-Lan Tai [taicl@cse.ust.hk]

2014.9-2017.3 MPhil in Pattern Recognition and Machine Learning

School of Astronautics, Beijing University of Aeronautics and Astronautics

GPA: 3.9/4.0

Supervisor: Dr. Bindang Xue [xuebd@buaa.edu.cn]

2010.9-2014.7 BEng in Measuring and Controlling Technology and Instrument Specialty

BA in English Literature (Dual Degree) University of Science and Technology Beijing

Publications

[1] **Jingyuan Liu**, Nazmus Saquib, Zhutian Chen, Rubaiat Habib Kazi, Li-Yi Wei, Hongbo Fu, Chiew-Lan Tai. "VCoach: A Customizable Visualization and Analysis System for Video-based Running Coaching." In submission to VIS2022.

- [2] Jingbo Wang, Yu Rong, **Jingyuan Liu**, Sijie Yan, Dahua Lin, Bo Dai. "Towards Diverse and Natural Scene-aware 3D Human Motion Synthesis." CVPR2022.
- [3] **Jingyuan Liu**, Mingyi Shi, Qifeng Chen, Hongbo Fu, Chiew-Lan Tai. "Normalized Human Pose Features for Human Action Video Alignment." ICCV2021 (Oral).
- [4] **Jingyuan Liu**, Hongbo Fu, Chiew-Lan Tai. "*PoseTween*: Pose-driven Tween Animation." In Proceedings of the 33rd Annual ACM Symposium on User Interface Software and Technology (UIST2020).
- [5] **Jingyuan Liu**, Xuren Zhou, Hongbo Fu, Chiew-Lan Tai. "*TAVE*: template-based augmentation of visual effects to human actions in videos." Proceedings of the 26th Pacific Conference on Computer Graphics and Applications: Posters. Eurographics Association, 2018.
- [6] **Jingyuan Liu**, Bindang Xue, Linyan Cui. "Analysis of statistical properties of atmospheric turbulence-induced image dancing based on Hilbert transform and dense optical flow." 2016 IEEE 13th International Conference on Signal Processing (ICSP).

Experience

2021.3-Now Internship @ Adobe Research

Led a research project on sports pose data analytics.

2020.12-2021.3 Visiting student @ CUHK MMLab

Assisted research on scene-aware human motion synthesis

2020.7 Summer School @ Zhejiang University CAD&CG State Key Lab

Subject: Visualization and Visual Analytics

2019.1 Google AI ML Winter Camp

Co-developed a framework *QuickPoem* that generates poems from free-hand drawings.

2016.9-2016.12 Internship @ Sony China Research Lab

Assisted research on applying one-shot learning to hand gesture recognition

2012.9-2012.11 Internship @ Tsinghua University State Key Lab of Tribology

Assisted with printed circuit boards assembly for multi-frequency instrument analysis.

Skills

Programming: Python, Matlab, C++.

Frameworks: PyTorch, PyQt5, OpenCV.

Foreign Language: Mandarin: native; English: TOEFL 104 (R:26, L:29, S:24, W:25).

Teaching

2018.9-2019.6 Teaching Assistant @ HKUST

COMP2711 Discrete Mathematical Tools in Computer Science 2018Spring, 2019Fall COMP2611 Computer Organization 2020Spring, 2021Spring

Awards

2017	HKUST Research Postgraduate Scholarship
2015	National Postgraduate Scholarship
2013	Champion of Worldwide Freescale Cup Intelligent Car Race
2013	ARM Special Award
2013	2nd Runner-up in National Undergraduate Electronic Design Contest (Beijing Division)
2012	1st Runner-up in Mathematical Contest in Modeling
2011	1st Runner-up in National English Contest for College Students