

# 刘婧媛 Jingyuan Liu

Computer vision and graphics

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Homepage: <https://liu-jingyuan.github.io/>

## Education

- 2017.9-2022.6 PhD in Computer Science and Engineering**  
Hong Kong University of Science and Technology  
Research interest: 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. "PoseCoach: A Customizable Visualization and Analysis System for Video-based Running Coaching." In submission.
- [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). IEEE, 2016.

## Experiences

- 2021.3-2022.3 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; Cantonese: fluent; English: TOEFL 104 (R:26, L:29, S:24, W:25).

## Teaching

**2018.9-2021.6 Teaching Assistant @ HKUST**

COMP2711 Discrete Mathematical for Computer Science 2018Spring, 2019Fall

COMP2611 Computer Organization 2020Spring, 2021Spring

## Awards

2017 HKUST Research Postgraduate Studentship

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