

# Yang Zhou

(857) 294-6079 | [zhz128ly@gmail.com](mailto:zhz128ly@gmail.com)

[\[Homepage\]](#) [\[Google Scholar\]](#)

Research Scientist at Adobe Research, specializing in video generation, visual effects, and developing applications for digital avatars.

## JOB EXPERIENCE

---

**Adobe Research, San Jose, CA** | Research Scientist May 2021-present

- Video generation and editing, digital human and characters, 3D generation

**UMass Amherst, Amherst, MA** | Research Assistant Sept. 2016-May. 2021

- Audio-driven character speech animation, Character rigging and skinning, 3D scene generation

**Adobe Research, Seattle, CA** | Intern Jun 2020-Sept. 2020 and Jun 2019-Sept. 2019

- Human speech video reenactment
- Cartoon character audio-driven speech animation

**Wayfair, Boston, MA** | Intern June 2018-Dec. 2018

- 3D scene synthesis based on graph neural networks

**Shanghai Jiao Tong University, Shanghai, China** | Research Assistant Sept. 2013-Mar. 2016

- Motion trajectory representation and analysis

## PUBLICATIONS

---

1. Desai Xie, Zhan Xu, Yicong Hong, Hao Tan, Difan Liu, Feng Liu, Arie Kaufman, Yang Zhou. "**Progressive Autoregressive Video Diffusion Models.**" Arxiv (2024).
2. Yixuan Ren, Yang Zhou, Jimei Yang, Jing Shi, Difan Liu, Feng Liu, Mingi Kwon, and Abhinav Shrivastava. "**Customize-a-Video: One-Shot Motion Customization of Text-to-Video Diffusion Models.**" ECCV (2024).
3. Mingi Kwon, Seoung Wug Oh, Yang Zhou, Joon-Young Lee, Difan Liu, Haoran Cai, Baqiao Liu, Feng Liu, Youngjung Uh. "**HARIVO: Harnessing Text-to-Image Models for Video Generation.**" ECCV (2024).
4. Yiran Xu, Taesung Park, Richard Zhang, Yang Zhou, Eli Shechtman, Feng Liu, Jia-Bin Huang, and Difan Liu. "**VideoGigaGAN: Towards Detail-Rich Video Super-Resolution.**" Arxiv (2024).
5. Zhenzhen Weng, Jingyuan Liu, Hao Tan, Zhan Xu, Yang Zhou, Serena Yeung-Levy, and Jimei Yang. "**Template-Free Single-View 3D Human Digitalization with Diffusion-Guided LRM.**" Arxiv (2024).
6. Xiaojuan Wang, Taesung Park, Yang Zhou, Eli Shechtman, and Richard Zhang. "**Jump Cut Smoothing for Talking Heads.**" Arxiv (2024).
7. Boxiao Pan, Zhan Xu, Chun-Hao Paul Huang, Krishna Kumar Singh, Yang Zhou, Leonidas J. Guibas, and Jimei Yang. "**ActAnywhere: Subject-Aware Video Background Generation.**" NeurIPS (2024).
8. Sanghyun Son, Matheus Gadelha, Yang Zhou, Zexiang Xu, Ming Lin, Yi Zhou. "**DMesh: A Differentiable Mesh Representation.**" NeurIPS (2024).

9. Omid Taheri, Yi Zhou, Dimitrios Tzionas, Yang Zhou, Duygu Ceylan, Soren Pirk, and Michael J. Black. "**GRIP: Generating Interaction Poses Using Spatial Cues and Latent Consistency.**" 3DV (2024).
10. Yicong Hong, Kai Zhang, Jiuxiang Gu, Sai Bi, Yang Zhou, Difan Liu, Feng Liu, Kalyan Sunkavalli, Trung Bui, and Hao Tan. "**LRM: Large Reconstruction Model for Single Image to 3D.**" ICLR (2024).
11. Shaowei Liu, Yang Zhou, Jimei Yang, Saurabh Gupta, and Shenlong Wang. "**ContactGen: Generative Contact Modeling for Grasp Generation.**" ICCV (2023).
12. Yicong Hong, Yang Zhou, Ruiyi Zhang, Franck Dornoncourt, Trung Bui, Stephen Gould, and Hao Tan. "**Learning Navigational Visual Representations with Semantic Map Supervision.**" ICCV (2023).
13. Zhan Xu, Yang Zhou, Li Yi, and Evangelos Kalogerakis. "**MORIG: Motion-Aware Rigging of Character Meshes from Point Clouds.**" ACM Transactions on Graphics (2022).
14. Zhouyingcheng Liao, Jimei Yang, Jun Saito, Gerard Pons-Moll, and Yang Zhou. "**Skeleton-Free Pose Transfer for Stylized 3D Characters.**" In Proceedings of the European Conference on Computer Vision (ECCV), 2022.
15. Chun-Han Yao, Jimei Yang, Duygu Ceylan, Yi Zhou, Yang Zhou, and Ming-Hsuan Yang. "**Learning Visibility for Robust Dense Human Body Estimation.**" In Proceedings of the European Conference on Computer Vision (ECCV), 2022.
16. Zhan Xu, Matthew Fisher, Yang Zhou, Deepali Aneja, Rushikesh Dudhat, Li Yi, and Evangelos Kalogerakis. "**APES: Articulated Part Extraction from Sprite Sheets.**" In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.
17. Yang Zhou, Jimei Yang, Dingzeyu Li, Jun Saito, Deepali Aneja, and Evangelos Kalogerakis. "**Audio-Driven Neural Gesture Reenactment with Video Motion Graphs.**" In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.
18. Yang Zhou, Xintong Han, Eli Shechtman, Jose Echevarria, Evangelos Kalogerakis, and Dingzeyu Li. "**MakeItTalk: Speaker-Aware Talking-Head Animation.**" ACM Transactions on Graphics (2020).
19. Zhan Xu, Yang Zhou, Evangelos Kalogerakis, Chris Landreth, and Karan Singh. "**RigNet: Neural Rigging for Articulated Characters.**" ACM Transactions on Graphics (2020).
20. Zhan Xu, Yang Zhou, Evangelos Kalogerakis, and Karan Singh. "**Predicting Animation Skeletons for 3D Articulated Models via Volumetric Nets.**" In Proceedings of the International Conference on 3D Vision (3DV), 2019.
21. Yang Zhou, Zachary While, and Evangelos Kalogerakis. "**SceneGraphNet: Neural Message Passing for 3D Indoor Scene Augmentation.**" In Proceedings of the IEEE International Conference on Computer Vision (ICCV), 2019.
22. Yang Zhou, Zhan Xu, Chris Landreth, Subhransu Maji, Evangelos Kalogerakis, and Karan Singh. "**VisemeNet: Audio-Driven Animator-Centric Speech Animation.**" ACM Transactions on Graphics (2018).
23. Yi, Li, Lin Shao, Manolis Savva, Haibin Huang, Yang Zhou, et al. "**Large-Scale 3D Shape Reconstruction and Segmentation from ShapeNet Core55.**" In Proceedings of the IEEE International Conference on Computer Vision Workshop (ICCVW) on Learning to See from 3D Data, 2017.
24. Lin, Weiyao, Yang Zhou, Hongteng Xu, Junchi Yan, Mingliang Xu, Jianxin Wu, and Zicheng Liu. "**A Tube-and-Droplet-Based Approach for Representing and Analyzing Motion Trajectories.**" IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 2017.

25. Xu, Hongteng, Yang Zhou, Weiyao Lin, and Hongyuan Zha. "**Unsupervised Trajectory Clustering via Adaptive Multi-Kernel-Based Shrinkage.**" In Proceedings of the International Conference on Computer Vision (ICCV), 2015.
26. Zhou, Yang, Weiyao Lin, Hang Su, Jianxin Wu, Jinjun Wang, and Yu Zhou. "**Representing and Recognizing Motion Trajectories: A Tube and Droplet Approach.**" In Proceedings of the ACM International Conference on Multimedia (MM), 2014.

## **PATENTS**

---

- Articulated part extraction from sprite sheets using machine learning, US11875442
- Style-aware audio-driven talking head animation from a single image, US11776188
- Re-timing a video sequence to an audio sequence based on motion and audio beat detection, US11682238.
- Style-aware audio-driven talking head animation from a single image, US11417041B2

## **ACADEMIC SERVICE**

---

- Reviewer for: TPAMI, TMM, CVPR, ECCV, ICCV, ACCV, AAAI, 3DV, SIGGRAPH, SIGGRAPH Asia, EG, TVCG, C&G
- IPC for: EG, SIGGRAPH Asia

## **EDUCATION BACKGROUND**

---

- |                                                   |                      |
|---------------------------------------------------|----------------------|
| <b>University of Massachusetts Amherst</b>        | Sept. 2016-May 2021  |
| ➤ Ph.D. in Computer Science                       |                      |
| ➤ <i>Thesis: Audio-driven Character Animation</i> |                      |
| ➤ Advisor: Evangelos Kalogerakis                  |                      |
| <b>Georgia Institute of Technology</b>            | May 2013-May 2016    |
| ➤ M.S. in Electrical & Computer Engineering       |                      |
| <b>Shanghai Jiao Tong University</b>              | Sept. 2009-Mar. 2016 |
| ➤ B.S. and M.S. in Electronic Engineering         |                      |

## **HONORS AND AWARDS**

---

- 2016 Edward Riseman and Allen Hanson **Scholarship**
- 2014 Wen-Yuan Pan **Scholarship**
- 2013 Outstanding Graduates of Shanghai (top 5%)
- 2011 Samsung **Scholarship**
- 2012 Mathematics Contest in Modeling (MCM), **Meritorious Winner**
- 2010 National Mathematics Invitational Contest in Modeling, **First Prize**
- 2009 National Physics Contest for College Students, **First Prize**
- 2008 National Physics Olympic Competition, **First Prize (top 0.1%)**

## **SKILLS**

---

Proficiency in programming languages: Python, C/C++, MATLAB, Maya, Maxscript

Extensive experience in deep learning packages: Pytorch, Tensorflow