Yang Zhou

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EDUCATION BACKGROUND

University of Massachusetts Amherst Sept. 2016-May 2021
Ph.D. in Computer Science
Thesis: Audio-driven Character Animation
Advisor: Evangelos Kalogerakis

Georgia Institute of Technology May 2013-May 2016
M.S. in Electrical & Computer Engineering

Shanghai Jiao Tong University Sept. 2009-Mar. 2016
B.S. and M.S. in Electronic Engineering

EXPERIENCE

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

- Character animation
- Digital human capture and synthesis
- 3D-aware object and scene synthesis

UMass Amherst, Amherst, MA | Research Assistant Sept. 2016-May. 2021
Advisor: Evangelos Kalogerakis

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

Adobe Research, San Jose, CA | Research Intern Jun 2020-Sept. 2020
Advisors: Jimei Yang, Dingzeyu Li, Jun Saito, Deepali Aneja

- Human speech video reenactment

Adobe Research, Seattle, WA | Research Intern Jun 2019-Sept. 2019
Advisors: Dingzeyu Li, Eli Shechtman, Jose Echevarria

- Cartoon character audio-driven speech animation

Wayfair, Boston, MA | Research Intern. June 2018-Dec. 2018
Advisors: Mike Festa, Rebecca Perry, Tim Zhang

- 3D Scene Graph and Synthesis based on deep learning

Shanghai Jiao Tong University, Shanghai, China | Research Assistant Sept. 2013-Mar. 2016
Advisor: Weiyao Lin

- Motion Trajectory Representation and Analysis

PUBLICATIONS

- Zhan Xu, **Yang Zhou**, Li Yi, Evangelos Kalogerakis, "Morig: Motion-aware rigging of character meshes from point clouds", *ACM Transactions on Graphics (TOG), 2022.*
- Zhouyingcheng Liao, Jimei Yang, Jun Saito, Gerard Pons-Moll, **Yang Zhou**, "Skeleton-free pose transfer for stylized 3D

characters", In *Proc. of the European Conference on Computer Vision (ECCV), 2022.*

- Chun-Han Yao, Jimei Yang, Duygu Ceylan, Yi Zhou, **Yang Zhou**, Ming-Hsuan Yang, "Learning Visibility for Robust Dense Human Body Estimation", In *Proc. of the European Conference on Computer Vision (ECCV), 2022.*
- Zhan Xu, Matthew Fisher, **Yang Zhou,** Deepali Aneja, Rushikesh Dudhat, Li Yi, Evangelos Kalogerakis, "APES: Articulated Part Extraction from Sprite Sheets", In *Proc. of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.*
- **Yang Zhou**, Jimei Yang, Dingzeyu Li, Jun Saito, Deepali Aneja, Evangelos Kalogerakis, "Audio-Driven Neural Gesture Reenactment With Video Motion Graphs", In *Proc. of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.*
- **Yang Zhou**, Xintong Han, Eli Shechtman, Jose Echevarria, Evangelos Kalogerakis, Dingzeyu Li, "Makelttalk: speaker-aware talking-head animation", *ACM Transactions on Graphics (TOG), 2020.*
- Zhan Xu, **Yang Zhou**, Evangelos Kalogerakis, Chris Landreth, Karan Singh, "RigNet: Neural Rigging for Articulated Characters", *ACM Transactions on Graphics (TOG), 2020.*
- Zhan Xu, **Yang Zhou**, Evangelos Kalogerakis, Karan Singh, "Predicting animation skeletons for 3d articulated models via volumetric nets", In *Proc. of the International Conference on 3D Vision (3DV), 2019.*
- **Yang Zhou**, Zachary While, Evangelos Kalogerakis, "SceneGraphNet: Neural Message Passing for 3D Indoor Scene Augmentation", In *Proc. of the IEEE International Conference on Computer Vision (ICCV), 2019.*
- **Yang Zhou**, Zhan Xu, Chris Landreth, Subhransu Maji, Evangelos Kalogerakis, Karan Singh, "VisemeNet: Audio-Driven Animator-Centric Speech Animation", *ACM Transactions on Graphics (TOG), 2018.*
- Li Yi, Lin Shao, Manolis Savva, Haibin Huang, **Yang Zhou**, et al., "Large-Scale 3D Shape Reconstruction and Segmentation from ShapeNet Core55", In *Proc. of the IEEE International Conference on Computer Vision Workshop (ICCVW) on Learning to see from 3D data, 2017.*
- Weiyao Lin, **Yang Zhou**, Hongteng Xu, Junchi Yan, Mingliang Xu, Jianxin Wu, Zicheng Liu, "A Tube-and-Droplet-based Approach for Representing and Analyzing Motion Trajectories", *IEEE Transaction Pattern Analysis and Machine Intelligence (TPAMI), 2017*.
- Hongteng Xu, **Yang Zhou**, Weiyao Lin, Hongyuan Zha, "Unsupervised Trajectory Clustering via Adaptive Multi-Kernel-based Shrinkage" In *Proc. of International Conference Computer Vision (ICCV), 2015.*
- **Yang Zhou,** Weiyao Lin, Hang Su, Jianxin Wu, Jinjun Wang, Yu Zhou, "Representing and recognizing motion trajectories: a tube and droplet approach" In *Proc. of ACM International Conference on Multimedia (MM), 2014.*

PATENTS

- Re-timing a video sequence to an audio sequence based on motion and audio beat detection, US20220261573A1.
- Style-aware audio-driven talking head animation from a single image, US11417041B2

PROFESSIONAL SERVICE

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

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