Yang Zhou

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EDUCATION BACKGROUND

University of Massachusetts Amherst Sept. 2016-current
Ph.D. in Computer Science, GPA: 3.9/4.0

Georgia Institute of Technology May 2013-May 2016
M.S. in Electrical & Computer Engineering, GPA: 3.6/4.0

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

RESEARCH INTEREST

Computer Vision, Computer Graphics, Deep Learning, Facial/Body Animation, Audio-visual Learning, Image/Video Understanding, Rigging/Skinning, 3D Scene Modeling

PUBLICATIONS

- **MakeItTalk: Speaker-Aware Talking Head Animation**
  Yang Zhou, X. Han, E. Shechtman, J. Echevarria, E. Kalogerakis, D. Li
  ACM Trans on Graphics, 39, 2020 (also presented in ACM SIGGRAPH AISA 2020).

- **RigNet: Neural Rigging for Articulated Characters**
  Z. Xu, **Yang Zhou**, E. Kalogerakis, C. Landreth, K. Singh
  ACM Trans on Graphics, 39, 2020 (also presented in ACM SIGGRAPH 2020).

- **SceneGraphNet: Neural Message Passing for 3D Indoor Scene Augmentation**
  Yang Zhou, Z. While, E. Kalogerakis
  Intl. Conf. Computer Vision (ICCV), 2019.

- **Predicting Animation Skeletons for 3D Articulated Models via Volumetric Nets**
  Z. Xu, **Yang Zhou**, E. Kalogerakis, K. Singh
  Intl. Conf. on 3D Vision (3DV) 2019.

- **VisemeNet: Audio-Driven Animator-Centric Speech Animation**
  Yang Zhou, Z. Xu, C. Landreth, S. Maji, E. Kalogerakis, K. Singh
  ACM Trans. on Graphics, 37(4), 2018 (also presented in ACM SIGGRAPH 2018).

- **Large-Scale 3D Shape Reconstruction and Segmentation from ShapeNet Core55**
  L. Yi, L. Shao, M. Savva, H. Huang, **Yang Zhou**, et al.
  Intl. Conf. Computer Vision Workshop (ICCVW) on Learning to see from 3D data, 2017

- **A Tube-and-Droplet-based Approach for Representing and Analyzing Motion Trajectories**
  W. Lin, **Yang Zhou**, H. Xu, J. Yan, M. Xu, J. Wu, Z. Liu
  IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI), 39(8), pp. 1489-1503, 2017.

- **Unsupervised Trajectory Clustering via Adaptive Multi-Kernel-based Shrinkage**
  H. Xu, **Yang Zhou**, W. Lin, H. Zha
  Intl. Conf. Computer Vision (ICCV), pp. 4328-4336, 2015.

- **Representing and recognizing motion trajectories: a tube and droplet approach**
  Yang Zhou, W. Lin, H. Su, J. Wu, J. Wang, Y. Zhou
  ACM Intl. Conf. on Multimedia (MM), pp. 1077-1080. 2014

RESEARCH EXPERIENCE

Adobe, San Jose, CA | Media Intelligence Lab | Research Intern June 2020-Nov.2020

Mentor: Jimei Yang, Jun Saito, Deepali Aneja, Dingzeyu Li

- Work on human gesture synthesis from speech audio signals and visual/music beats detection and alignment.

Adobe, Seattle, WA | Creative Intelligence Lab | Research Intern June 2019-Feb. 2020

Mentor: Dingzeyu Li, Eli Shechtman, Jose Echevarria, Wil Li

- Work on face forensics on speech videos, and synthesis of talking-head animations based on audio signals.

Wayfair, Boston, MA | Wayfair Next Research | Research Intern June 2018-Dec. 2018

Mentor: Tim Zhang, Rebecca Perry, Mike Festa

- Work on 3D indoor scene synthesis based on graph convolutional neural networks.

University of Massachusetts, Amherst, MA | Research Assistant Sept. 2016-current

Advisor: Evangelos Kalogerakis

- Work on relevant research in the field of computer graphs, computer vision and deep learning. More specifically, work on character (facial/body) animation, 3D scene generation, character rigging and skinning based on deep neural networks.

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

Advisor: Weiyao Lin

- Work on motion trajectories analysis and recognition with informative representation.

TEACHING EXPERIENCE

UMass CS590 | Game Programming. Fall 2019, 2020
UMass CS574/674 | Intelligent Visual Computing: A Neural Network Approach. Spring 2018, 2019
UMass CS373 | Introduction to Computer Graphics. Spring 2017

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 AND HOBBIES

Programming Languages: Python, C/C++, MATLAB, Maya, Pytorch
Hobbies: Photography, Table tennis, Game design