Jun Xing (邢骏)

Lead researcher, miHoYo (米哈游) *http://junxnui.github.io/* junxnui@gmail.com

RESEARCH

My research combines modern concepts in computer graphics, computer vision, deep learning and human computer interaction, with broad applications in 2D/3D /animation/audio contents authoring, analysis, and synthesis. In particular, I am interested in high-quality digital human modeling and rigging, performance capturing and retargeting, cloth and hair simulation, etc.. My goal is to design interactive/predictive systems and deep learning-based algorithms to free the artists from the tedious works so they can focus on creation.

EDUCATION

University of Hong Kong 2012.09－2016.12
PhD in computer science, advised by Dr. Li-Yi Wei

University of Science and Technology of China (USTC) 2008.09－2012.06
Bachelor in Electronic Engineering and Information

WORK EXPERIENCE

Joint Laboratory between Ruijin Hospital (瑞金医院) and miHoYo (米哈游) 2021.03－ongoing
Deputy director, Shanghai

miHoYo (米哈游) 2019.01－ongoing
Lead researcher, Shanghai

USC Institute for Creative Technologies 2017.05－2019.01
Postdoctoral researcher, supervised by Hao Li, Vision and Graphics Lab, Los Angeles

Adobe Research 2016.07－2016.09
Graphics research intern, Procedural Imaging Group, San Jose

Autodesk Research 2016.01－2016.04
HCI Graphics research intern, UI Graphics Group, Toronto

Microsoft Research Asia 2014.12－2015.04
Graphics research intern, Visual Computing Group, Beijing

PUBLICATIONS

[18] **Revisiting Knowledge Distillation: An Inheritance and Exploration Framework**
Zhen Huang, Xu Shen, Jun Xing, Tongliang Liu, Xinmei Tian, Houqiang Li, Bing Deng, Jianqiang Huang, Xiansheng Hua

CVPR 2021

[17] **Intuitive, Interactive Beard and Hair Synthesis with Generative Models**

Kyle Olszewski, Duygu Ceylan, *Jun Xing*, Jose I. Echevarria, Zhili Chen, Weikai Chen, Hao Li

CVPR 2020 (Oral)

[16] **Learning Formation of Physically-based Face Attributes**

Ruilong Li, Kalle Bladin, Yajie Zhao, Chinmay Chinara, Owen Ingraham, Pengda Xiang, Xinglei Ren, Pratusha Prasad, Biping Kishore, *Jun Xing*, Hao Li

CVPR 2020

[15] **Deep Face Normalization**

Koki Nagano, Jaewoo Seo, Huiwen Luo, Zejian Wang, *Jun Xing*, Liwen Hu, Lingyu Wei, Hao Li

SIGGRAPH Asia 2019

[14] **Learning Perspective Undistortion of Portraits**

Yajie Zhao, Zeng Huang, Tianye Li, Weikai Chen, Chloe LeGendre, Xinglei Ren, *Jun Xing*, Ari Shapiro, Hao Li

ICCV 2019 (Oral)

[13] **HairBrush for Immersive Data-Driven Hair Modeling**

Jun Xing, Koki Nagano, Weikai Chen, Haotian Xu, Li-Yi Wei, Yajie Zhao, Jingwan Lu, Byungmoon Kim, Hao Li

UIST 2019

[12] **Quantization Network**

Jiwei Yang, Xu Shen, *Jun Xing*, Xinmei Tian, Houqiang Li, Bing Deng, Jianqiang Huang, Xiansheng Hua

CVPR 2019

[11] **Mask-off: Synthesizing Face Images in the Presence of Head-mounted Displays**

Yajie Zhao, Qingguo Xu, Weikai Chen, *Jun Xing*, Chao Du, Xinyu Huang, Ruigang Yang

IEEE VR 2019

[10] **paGAN: Real-time Avatars Using Dynamic Textures**

Koki Nagano, Jaewoo Seo, *Jun Xing*, Lingyu Wei, Zimo Li, Shunsuke Saito, Aviral Agarwal, Jens Fursund, Hao Li

SIGGRAPH Asia 2018

[9] **HairNet: Single-View Hair Reconstruction using Convolutional Neural Networks**

Yi Zhou, Liwen Hu, *Jun Xing*, Weikai Chen, Han-Wei Kung, Xin Tong, Hao Li

ECCV 2018

[8] **Deep Volumetric Video from Very Sparse Multi-View Performance Capture**

Zeng Huang, Tianye Li, Weikai Chen, Yajie Zhao, *Jun Xing*, Chloe LeGendre, Linjie Luo, Chongyang Ma, Hao Li

ECCV 2018

[7] **Identity Preserving Face Completion for Large Ocular Region Occlusion**

Yajie Zhao, Weikai Chen, *Jun Xing*, Xiaoming Li, Zach Bessinger, Fuchang Liu, Wangmeng Zuo, Ruigang Yang

BMVC 2018

[6] **Autocomplete 3D Sculpting**

Mengqi Peng, *Jun Xing*, Li-Yi Wei

SIGGRAPH 2018

[5] **Mesoscopic Facial Geometry Inference using Deep Neural Networks**

Loc Huynh, Weikai Chen, Shunsuke Saito, *Jun Xing*, Koki Nagano, Andrew Jones, Hao Li, Paul Debevec

CVPR 2018 (Spotlight)

[4] **Sequence-to-Sequence Learning via Shared Latent Representation**

Xu Shen, Xinmei Tian, *Jun Xing*, Yong Rui, Dacheng Tao

AAAI 2018

[3] **Energy-Brushes: Interactive Tools for Illustrating Stylized Elemental Dynamics**

Jun Xing, Rubaiat Habib Kazi, Tovi Grossman, Li-Yi Wei, Jos Stam, George Fitzmaurice

UIST 2016

[2] **Autocomplete Hand-drawn Animations**

Jun Xing, Li-Yi Wei, Takaaki Shiratori, and Koji Yatani

SIGGRAPH Asia 2015

[1] **Autocomplete Painting Repetitions**

Jun Xing, Hsiang-Ting Chen and Li-Yi Wei

SIGGRAPH Asia 2014

EXHIBITIONS

VR Hair Salon for Avatars

Jun Xing, Liwen Hu, Koki Nagano, Li-Yi Wei, Hao Li.

SIGGRAPH 2019 Real-time Live!

Pinscreen Avatars in your Pocket: Mobile paGAN engine and Personalized Gaming

Koki Nagano, Shunsuke Saito, Mclean Goldwhite, Kyle San, Aaron Hong, Liwen Hu, Lingyu Wei, *Jun Xing*, Qingguo Xu, Hanwei Kung, Jiale Kuang, Aviral Agarwal, Erik Castellanos, Jaewoo Seo, Jens Fursund, Hao Li.

SIGGRAPH Asia 2018 Real-time Live!

Deep Learning-Based Photoreal Avatars for Online Virtual Worlds in iOS

Koki Nagano, Jaewoo Seo, *Jun Xing*, Kyle San, Aaron Hong, Mclean Goldwhite, Jiale Kuang, Aviral Agarwal, Caleb Arthur, Hanwei Kung, Stuti Rastogi, Carrie Sun, Stephen Chen, Jens Fursund, Hao Li.

SIGGRAPH 2018 Real-time Live!

MEDIA & PRESS

HairBrush for Immersive Data-Driven Hair Modeling

Befores&Afters;

paGAN: Real-time Avatars Using Dynamic Textures

SIGGRAPH Asia 2018 Technica Papers Trailer; *fxGuide*; *LA Times*;
CBS News; *CBC News*; *Netflix Original and Buzzfeed*; *Channel One News*;
Cartoon Brew; *NTV (Nippon TV) News*;

HairNet: Single-View Hair Reconstruction using Convolutional Neural Networks

Nvidia News; *MIT Tech Review*;

Autocomplete 3D Sculpting

3Dnchu; *MIT Tech Review*;

Autocomplete Hand-drawn Animations

WIRED; *FastCompany*; *The Next Web*; *AnimationWeek*; *MentalFloss*;
CoolThings; *TechTimes*; *3Dnchu*; *CGPress*;

TECHNICAL REPORTS & PATENTS

Techniques for Generating Dynamic Effects Animations

Jun Xing, Rubaiat Habib Kazi, Tovi Grossman, Li-Yi Wei, Jos Stam, George Fitzmaurice
US Patent 10467794 granted November 5, 2019

Deep RBFNet: Point Cloud Feature Learning using Radial Basis Functions

Weikai Chen, Xiaoguang Han, Guanbin Li, Chao Chen, *Jun Xing*, Yajie Zhao, Hao Li
arXiv:1812.04302.

ACADEMIC SERVICE

Committee Member:

IJCAI 2020
AAAI 2019, 2020
International Conference on Computational Visual Media (CVM) 2019
Pacific Graphics 2018
SIGGRAPH Emerging Technology 2017

Reviewer:

Computer Vision: CVPR; ECCV; ICCV; ACCV; TIP;
Computer Graphics: SIGGRAPH /SIGGRAPH Asia; PG; VRST;
Human Computer Interaction: CHI; UIST;

PROFESSIONAL SKILLS

Designer: neural network, algorithm, UI/UX, system
Programmer: C/C++, Python/Pytorch, Qt, Java, OpenGL/CV/VR, Unity

REFERENCES

Dr. Li-Yi Wei Adobe Research, lwei@adobe.com

Prof. Hao Li Pinscreen, USC, ICT, hao@hao-li.com
Dr. Rubaiat Habib Kazi Adobe Research, rhabib@adobe.com
Prof. Tovi Grossman University of Toronto, tovi@dgp.toronto.edu
Dr. Jos Stam Nvidia, stam.jos@gmail.com