

Jun Xing (邢骏)

Senior Research Scientist, miHoYo (米哈游)

<http://junxnui.github.io/>

junxnui@gmail.com

RESEARCH

My research combines modern concepts in computer graphics, computer vision, machine learning and human computer interaction, with broad applications in 2D/3D/VR/Animation contents authoring, analysis, and synthesis. I am interested in designing 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

| | |
|---|-----------------|
| miHoYo (米哈游) | 2019.01—ongoing |
| Senior research scientist, 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

[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

Before&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

Pending, US filed by Autodesk (2016), <https://patents.justia.com/patent/20180082460>

Stroke Operation Prediction for Three-Dimensional Digital Content

Pending, US filed by Adobe (2017), <https://patents.justia.com/patent/20180239434>

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:

AAAI 2019, 2020

International Conference on Computational Visual Media (CVM) 2019

Pacific Graphics 2018

SIGGRAPH Emerging Technology 2017

Reviewer:

Computer Vision: ICCV 2019; CVPR 2019; ACCV 2018; IEEE Transactions on Image Processing;

Computer Graphics: SIGGRAPH Asia 2017; PG 2018, 2016, 2015; VRST 2018;

Human Computer Interaction: CHI 2017;

PROFESSIONAL SKILLS

Designer:

algorithm, system, UI/UX

Programmer:

C/C++, Qt, Python, Java, OpenGL/CV/VR, Unity

AWARDS

| | |
|---|------------|
| Adobe Research Fellowship Finalist | 2016 |
| Excellent intern of Stars of Tomorrow Internship Program, Microsoft Research Asia | 2015 |
| HKU University Postgraduate Fellowships, HKU | 2012-2015 |
| Outstanding undergraduate, USTC | 2012 |
| Outstanding undergraduate research project, USTC | 2011 |
| Second prize in Mathematical Contest in Modeling | 2011 |
| National Scholarship, Ministry of Education, China | 2011 |
| National Inspirational Scholarship, Ministry of Education, China | 2009, 2010 |
| Outstanding Students Scholarship, USTC | 2008, 2009 |

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 |