Jun Xing (邢骏)

junxnui@gmail.com, http://junxnui.github.io

RESEARCH

My research focuses on Computer Graphics and Human Computer Interaction. I have broad interest in machine/deep learning for text, image and video analysis and generation, VR/AR for content creation, and UI/UX design. In particular, I am interested in analyzing the repetitions in human-centered activities, such as painting and writing, and providing online "intelligent" suggestions, via a natural interface, to reduce manual labor while improving quality and performance.

EDUCATION

PhD, Computer Science 2012.09—2016.12

University of Hong Kong, Dept. of Computer Science Advised by Dr. Li-Yi Wei

Bachelor, Electronic Engineering and Information Science

2008.09 - 2012.06

University of Science and Technology of China (USTC), Dept. of Electronic Engineering and Information Science GPA: 3.85/4.3

WORK EXPERIENCE

University of Southern California, Postdoc in Vision and Graphics Group of ICT, Los Angeles	2017.05—present
Adobe, Procedural Imaging Group intern, San Jose	2016.07-2016.09
Autodesk Research, UI Graphics research intern in the UI Group, Toronto	2016.01-2016.04
Microsoft Research Asia, Graphics research intern in the Visual Computing Group, Beijing	2014.12-2015.04

PUBLICATIONS

- Mengqi Peng, Jun Xing, Li-Yi Wei. Autocomplete 3D Sculpting. arXiv:1703.10405 [cs.GR].
- Jun Xing, Rubaiat Habib Kazi, Tovi Grossman, Li-Yi Wei, Jos Stam, George Fitzmaurice. Energy-Brushes: Interactive Tools for Illustrating Stylized Elemental Dynamics. UIST 2016.
- Jun Xing, Li-Yi Wei, Takaaki Shiratori, and Koji Yatani. Autocomplete Hand-drawn Animations. ACM Transactions on Graphics (TOG), Proceedings of ACM SIGGRAPH Asia 2015.
- Jun Xing, Hsiang-Ting Chen and Li-Yi Wei. Autocomplete Painting Repetitions. ACM Transactions on Graphics (TOG), Proceedings of ACM SIGGRAPH Asia 2014.

MORE RESEARCH EXPERIENCE

Sequence-to-Sequence Learning Via Shared Latent Representation

2016.10-2017.04

We propose a general and flexible framework for sequence-to-sequence learning, where different types of media contents could be encoded to and decoded from a shared latent representation.

Autocomplete VR painting

2016.07-present

The goal is to handle different types of repetitions in VR painting, including the detail decorative strokes, the surface strokes, and even higher-level scaffold, in a simple and general framework.

3D Campus 2011.11-2012.06

Outstanding Bachelor's Thesis Award, USTC

Designed a 3D campus system to help people visit USTC more realistically. The virtual campus supports functions like 3D wandering, navigation, and index, etc.

Ray Tracing 2011.10-2012.01

Training

After reading the book of "An Introduction to Ray Tracing" by Glassner, I traced the animated BART scenes, which includes scenes of Kitchen, Museum, and Robots.

Super-resolution of A Single Image

2011.05-2011.11

Outstanding Undergraduate Research Project, USTC

Proposed new algorithm called "Super-resolution via spectral matting", with state-of-the-art performance both visually and qualitatively in PNSR. This project is finished when I was a research assistant in Institute of Statistical Signal Processing, USTC.

ACADEMIC SERVICE

Committee Member:

SIGGRAPH 2017 Emerging Technology

Reviewer:

PG 2015, 2016

IEEE Computer Graphics and Applications 2016

SIGGRAPH Asia 2017

CHI 2017

Computer & Graphics 2017

IEEE Transactions on Cognitive and Developmental Systems 2017

PROFESSIONAL SKILLS

Designer: algorithm, system, UI/UX

Programmer: C/C++, Qt, Python, Java, OpenGL/CV/VR

Artist: digital painting, hand-drawn animation

AWARDS

Excellent intern of Stars of Tomorrow Internship Program, Microsoft Research Asia (MSRA)	2015
HKU University Postgraduate Fellowships (UPF), 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, P.R.China	2011
National Inspirational Scholarship, Ministry of Education, P.R.China	2009, 2010
Outstanding Students Scholarship, USTC	2008, 2009