

Jun Xing (邢骏)

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EDUCATION

PhD candidate, Computer Science

2012.09—present (2016.12)

University of Hong Kong, Dept. of Computer Science

Advised by Prof. 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

RESEARCH AREA

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.

PUBLICATIONS

- **Jun Xing**, Rubaiat Habib Kazi, Tovi Grossman, Li-Yi Wei, Jos Stam, George Fitzmaurice. Energy-Brushes: Interactive Tools for Illustrating Stylized Elemental Dynamics. Accepted by 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.

RESEARCH EXPERIENCE

Autocomplete VR painting

2016.07—present

My current project in Adobe internship

The goal is to handle different types of repetitions in VR painting, including the detail decorative strokes (e.g. autocomplete fish scales), the surface strokes (e.g. filling/smoothing surfaces), and even higher-level scaffold strokes (e.g. smart modeling), in a simple and general framework.

Autocomplete Digital Sculpting

2016.06—present

We are designing an interactive digital sculpting system that analyzes what users have done in the past and predicts what they might or should do in the future.

Energy-Brushes: Interactive Tools for Illustrating Stylized Elemental Dynamics

2016.01—2016.04

Accepted by UIST 2016

We present a new animation framework and interactive system that enables artists to design elemental dynamics by sketching the underlying forces with energy brushes to animate drawings and textures.

- Autocomplete Hand-drawn Animations** 2014.12—2015.05
Published by SIGGRAPH Asia 2015
 We present an interactive drawing system that helps users produce animation more easily and in a better quality while preserving manual drawing practices. See live action at <https://www.youtube.com/watch?v=w0YmWiy6sA4>.
- Autocomplete Painting Repetitions** 2013.01—2014.05
Published by SIGGRAPH Asia 2014
 We present an interactive digital painting system that auto-completes tedious repetitions while preserving nuanced variations and maintaining natural flows. See live action at <https://www.youtube.com/watch?v=m7MEAw46Ojo>.
- 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 advised by Li-Yi Wei
 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.

WORK EXPERIENCE

- 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

ACADEMIC SERVICE

Reviewer: PG 2015, 2016, IEEE Computer Graphics and Applications 2016

PROFESSIONAL SKILLS

Designer: algorithm, system, UI/UX
 Programmer: C/C++, Qt, Java, OpenGL/CV/VR
 Artist: digital painting, hand-drawn animation, video

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