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**

Published 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, CHI 2017, Computer & Graphics 2017

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**