**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.

**Video to Sentence Synthesis via LSTM 2016.07－present**

We are designing a new architecture of neural network to synthesize sentence from short video input.

**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**