

Panpan Xu

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Education

2010–Present **Ph.D Candidate, Computer Science, Hong Kong University of Science and Technology.**

2005–2009 **B.S., Computer Science, Zhejiang University (Chu Kochen Honors College).**

Ph.D Qualification Exam

Title A Survey on Visual Analysis of Graphs

Supervisor Prof. Huamin Qu

Bachelor's Thesis

Title Physically Realistic Flow Simulation in Computer Animation

Supervisor Prof. Xiaogang Jin

Developed a prototype system for simulating and rendering visual effects of flows like smoke and fire, speeded by utilizing graphics hardware programming.

Experience

Present **Visiting Student, Information Interface Lab (IILab) at Georgia Institute of Technology.**

2012–2013 **Research Intern, Microsoft Research Asia, Mentor, Dr. Yingcai Wu.**

Publications

J-2013 Visual Analysis of Topic Competition on Social Media. *in IEEE Transactions on Visualization and Computer Graphics (accepted by IEEE Visual Analytics Science and Technology)*

Panpan Xu, Yingcai Wu, Enxun Wei, Tai-Quan Peng, Shixia Liu, Jonathan J.H. Zhu, Huamin Qu.

Developed a framework that combines analysis techniques (text and time series analysis) with interactive visualization to help analyze the process of topic competition on Twitter, the opinion leaders' influence in the process, and the topic transition trend of the user groups.

J-2013 Visual Analysis of Set Relations in a Graph. *in Computer Graphics Forum (Proceedings of EuroVis)*

Panpan Xu, Fan Du, Conglei Shi, Nan Cao, Hong Zhou, Huamin Qu.

Developed visualization technique to analyze homophily effect in social networks (a.k.a. "birds with similar feather fly together"), and a set visualization technique that employs the metaphor of a railway map.

J-2013 Edge Bundling in Information Visualization. *in Tsinghua Science and Technology*

Hong Zhou, **Panpan Xu**, Xiaoru Yuan, Huamin Qu

Surveyed edge bundling techniques used to reduce edge cluttering and to facilitate connection pattern detection in graph drawing.

J-2012 RankExplorer: Visualization of Ranking Changes in Large Time Series Data. in *IEEE Transactions on Visualization and Computer Graphics (Proceedings of InfoVis)*

Conglei Shi, Weiwei Cui, Shixia Liu, **Panpan Xu**, Wei Chen, Huamin Qu.

Visualize the ranking change among a large number of items such as search words, which are ranked by their popularity and constantly changes overtime.

C-2012 Visualization of Taxi Drivers' Income and Mobility Intelligence. in *International Symposium on Visual Computing*

Yuan Gao, **Panpan Xu**, Lu Lu, He Liu, Siyuan Liu, Huamin Qu

C-2011 Visual analysis of people's mobility pattern from mobile phone data. in *International Symposium on Visual Information Communication and Interaction*

Jiansu Pu, **Panpan Xu**, Huamin Qu, Weiwei Cui, Siyuan Liu, Lionel M. Ni

Technical Skills

Languages Java, JavaScript, Python, C/C++, R

Vis Toolkits D3, Prefuse

Graphics WebGL, OpenGL, Shader Languages

Others Version Control Systems (Git), Web Development (html, css, javascript), Databases (MySQL, SQLite), Adobe Illustrator, etc.

Teaching Assistant Experience

2010-2013 Design and Analysis of Algorithms (Fall)

2011, 2013 Computer Graphics (Spring)

2010 Object-Oriented Programming and Data Structures (Spring)

Awards and Scholarships

2010-2013 Research/Teaching Assistant Studentship, HKUST

2006-2008 Zhejiang University Academic Scholarships

2007 Mathematical Modeling Contest 1st Prize in Zhejiang Province

2007 The 5th Mathematical Modeling Contest of Zhejiang University, 2nd Prize

Professional Activities

2013 Doctoral Colloquium at VIS Conference

2013 Student Volunteer at VIS Conference

Languages

Chinese Mother tongue

English Fluent (Toefl 104/120, taken in 2008)