

MENGTING SUN

<http://immengting.com/>

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TECHNICAL SKILLS

Languages

- C/C++, C#, Java
- JavaScript, PHP
- CSS/CSS3, HTML5
- ActionScript

Software

- Microsoft Office
- Matlab, Tableau
- SQL Server/ MySQL
- PhotoShop, InDesign, Flash

Platforms

- Windows
- Linux/Unix

EDUCATION

- M.S, School of Interactive Arts and Technology, Simon Fraser University, Canada. (Sept 2011 – June 2014)
Research Orientation: HCI, Visual Analytics, Aesthetic Visualization
Thesis topic: Exploring Aesthetic Visualization for Promoting Consumer Energy Conservation.
- B.S, School of Computer Science, Simon Fraser University (SFU), Canada. (Sept 2008 – April 2011)
- B.E, School of Computer Science and Technology, Zhejiang University (ZU), China. (Sept 2006 - June 2008)
Degree program: SFU-ZU Dual Degree Program

EXPERIENCES

Intern, BC Hydro PowerSmart, Burnaby, BC, Mar 2014 - present

- Explore gamification techniques for engaging people in exploring energy use and learning about best practices in energy conservation.
- Design and develop web-based energy conservation game for mobile devices with PhoneGap.

Research Assistant, HCSSL Lab, Simon Fraser University, Surrey, BC, May 2012 – Mar 2014

- Designed and explored various visualization tools for real-time residential energy use feedback with informative art approach (sketches, storyboards).
- Developed various web-based visualization prototypes with Java, Javascript (D3.js, jQuery), CSS, PHP and MySQL.
- Designed and conducted user studies; analyzed data using qualitative and quantitative methods.

Teaching Assistant, Simon Fraser University, Surrey, BC, Jan 2012 – Apr 2012

- Course: Introduction to Visual Analytics.
- Mentored undergraduate students in various areas related to the course: programming in Processing/Java, use of Tableau software, data visualization applications.

Research Assistant, EMMIE Lab, Simon Fraser University, Surrey, BC, Apr 2011 - Aug 2011

- Developed a Flash based visualization system using Flex to help analyze data for a social health game.

Quality Assurance (Co-op), NetApp, Vancouver, BC, Jan 2011 – Apr 2011

- Created a plugin for Wireshark network protocol analyzer to dissect Cloud Data Management Interface metadata.

Junior IT Professional (Co-op), Powerex, Vancouver, BC, Jan 2010 - Aug 2010

- Developed Windows applications with Excel VBA and C# for reporting usage.
- Designed and conducted unit tests (C++) and automated UI tests for various project teams.

Research Assistant, Irmacs Center, Simon Fraser University, Burnaby, BC, Mar 2009 - Dec 2009

- Created a virtual environment with a game engine that features with Wii interaction.
- Developed a 3D narrative data visualization tool for data analysis with different aspects: time, location and frequency.
- Developed GENIUS project: an agent-based decision support system that simulates large-scale urban movement.

PUBLICATIONS

Exhibition

“Seeing information in a new way: Ambient and Artistic Visualization for Residential Energy Use”, National Museum of Science and Technology, Ottawa, ON, Canada, April, 2014

Poster

M. Sun, L. Bartram. “Informative Art for Energy Use Feedback”, *2013 GRAND (Graphics, Animation, and New Media) Conference*, Toronto, ON, Canada, May 2013

Papers

M. Sun, L. Bartram. “Energy Conservation Game: Exploring Alternative Visualizations for Residential Energy Use”, *2014 GRAND (Graphics, Animation, and New Media) Conference*, Ottawa, ON, Canada, May 2014

A. J. Park, H. H. Tsang, M. Sun and U. Glässer, “An agent-based model and computational framework for counter-terrorism and public safety based on swarm intelligence”, *Security Informatics 1(1)*, Aug, 2013

M. S. El-Nasr, L. Andres, T. Lavender, N. Funk, N. Jahangiri, M. Sun, "IgnitePlay: Encouraging and sustaining healthy living through social games," *igic*, pp.23-25, *2011 IEEE International Games Innovation Conference*, 2011

H. H. Tsang, A. J. Park, M. Sun and U. Glässer. “GENIUS: A Computational Modeling Framework for Counter-Terrorism Planning and Response”. In Proc. *2010 IEEE Intl. Conference on Intelligence and Security Informatics*, Vancouver, BC, Canada, May 2010

AWARDS

- Mitacs Internship Award, 2014
- Singapore Technologies Engineering Scholarship, 2006, 2007, 2008
- First-class Scholarship for Excellent Students of Zhejiang University, 2006