#### MENGTING SUN

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# TECHNICAL SKILLS

Languages		Software		Platforms	
•	C/C++, Java	•	Microsoft Office	•	Windows
•	JavaScript, CSS	•	Matlab, Tableau	•	Linux/Unix
•	PHP, .NET	•	SQL Server/ MySQL		
•	ActionScript	•	PhotoShop, InDesign, Flash		

#### **EXPERIENCES**

### Mitacs Internship, BC Hydro PowerSmart, 2014 (up-coming)

• Explore gamification techniques for engaging people in exploring energy use and learning about best practices in energy conservation.

# Research Assistant, HCSSL Lab, Simon Fraser University, May 2012 - present

- Explore various visualization tools for real-time residential energy use feedback with informative art approach.
- Design and conduct user studies; analyze data using qualitative and quantitative methods.

#### Teaching Assistant, School of Interactive Arts + Technology, Simon Fraser University, 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, EMMIIE Lab, Simon Fraser University, Apr 2011 - Aug 2011

• Developed a web-based visualization system 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 for reporting usage.
- Designed and conducted unit tests and automated UI tests for various project teams.

#### Research Assistant, Mocssy Program, Irmacs Center, Simon Fraser University, Mar 2009 - Dec 2009

- Created a virtual environment 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, April, 2014 (Up coming)

#### **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 (Accepted)

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

# **EDUCATION**

- M.S, School of Interactive Arts and Technology, Simon Fraser University, Canada. (Sept 2011 April, 2014) 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 (Bachelor of Science degree from Simon Fraser University and Bachelor of Computing engineering degree from Zhejiang University).

# **AWARDS**

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