

Mi (Mia) Feng

PHD STUDENT · INTERACTIVE VISUALIZATION RESEARCH · VIS & VR DEV

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Education

Ph.D. in Computer Science

WORCESTER POLYTECHNIC INSTITUTE (WPI)

Research Topic: Interactive Visualization **Advisor:** Prof. Lane Harrison

Worcester, MA, USA

Jan. 2016 - Present

M.S. in Computer Science

WORCESTER POLYTECHNIC INSTITUTE (WPI)

Research Topic: Virtual Reality **Advisor:** Prof. Robert Lindeman

Worcester, MA, USA

Aug. 2013 - Dec. 2015

B.E. in Software Engineering (Media Art and Science)

TONGJI UNIVERSITY (TJU)

GPA: 4.69/5.0

Shanghai, China

Sept. 2009 - Jun. 2013

Academic & Professional Experience

ACADEMIA

Worcester Polytechnic Institute

RESEARCH ASSISTANT

- Advised by Prof. Lane Harrison.
- Researching on the interaction techniques supporting user exploration of data visualizations on the web.

Worcester, MA, USA

Aug. 2016 - Present

Worcester Polytechnic Institute

TEACHING ASSISTANT

- Assisted courses including Computer Graphics, Computer Animation, Game Development, Foundations of Computer Science, Software Engineering, Webware, etc.

Worcester, MA, USA

Aug. 2014 - May. 2016

Worcester Polytechnic Institute

RESEARCH ASSISTANT

- Advised by Prof. Robert Lindeman.
- Developed VR wind and floor vibration sensory feedback systems, including hardware and software.
- Installed the systems, and integrated them with VR center control programs, in Doha, Qatar.
- Tech keywords: C++, servo motor, vibration actuator, Arduino.

Worcester, MA, USA

Nov. 2013 - Aug. 2014

INTERNSHIPS

Pacific Northwest National Laboratory

PHD INTERN

- Mentored by Dr. Meg Pirrung, in the Visual Analytics group.
- Participated in the design and implementation of interactive user interfaces for event detection from electron microscopy video streams (EM) and insider threat detection on the cloud (ITDC).
- Tech keywords: D3.js, R, Jira.

Richland, WA, USA

Summer 2017

Bosch Research and Technology Center

AR INTERN

- Mentored by Dr. Soohwan Kim, in the Visual Computing group.
- Implemented multi-modal interaction in Unity3D for augmented reality applications, integrating the gesture and speech input components with the center control.
- Tech keywords: Unity3D, Myo Gesture Control Armband, configurable finite state machine.

Palo Alto, CA, USA

Summer 2016

iD Tech

TECH INSTRUCTOR

- Worked at Game Design & Development Academy (students' ages 13-18).
- Instructed two courses: Game Programming for iOS & Android with Unity, Game Programming with C++.

Cambridge, MA, USA

Summer 2015

- Mentored by Vincent Dong and Stella Chen, in the Mobile Classifieds team.
- Developed the automation test for mobile web and mobile app.
- Tech keywords: Java, MAUI framework, Maven.

Publications & Posters

JOURNAL & CONFERENCE FULL PAPERS

- **Mi Feng**, Cheng Deng, Evan M. Peck, Lane Harrison. HindSight: Encouraging Exploration through Direct Encoding of Personal Interaction History. *IEEE Transactions on Visualization and Computer Graphics (Proc. InfoVis)*, 2016. (Website: <https://wpivis.github.io/hindsight/>)
- **Mi Feng**, Arindam Dey, Robert W. Lindeman. An Initial Exploration of a Multi-Sensory Design Space: Tactile Support for Walking in Immersive Virtual Environments. *IEEE Symposium on 3D User Interfaces (3DUI)*, 2016.
- Lyndsey Franklin, Megan Pirrung, Michelle Dowling, **Mi Feng**, and Leslie Blaha. Toward a Design Space for Cyber Security Visualizations Using Threat Models and Human-Centered Design. *IEEE Symposium on Visualization for Cyber Security (VizSec)*, 2017.

POSTERS

- **Mi Feng**, Cheng Deng, Evan Peck, Lane Harrison. The Impact of Text-based Search in Interactive Data Visualizations on the Web. *IEEE Conference on Information Visualization (InfoVis)*, 2017.
- Michelle Dowling, Lyndsey Franklin, **Mi Feng**, Meg Pirrung, Robert Jasper, Joseph Cottam, Leslie Blaha. Exploring the Design Space for Cyber Alerts in Context. *IEEE Symposium on Visualization for Cyber Security (VizSec)*, 2017.
- **Mi Feng**, Robert W. Lindeman, Hazem Abdel-Moati, Jacob C. Lindeman. HapticChairIO: A System to Study the Effect of Wind and Floor Vibration on Spatial Orientation in VEs. *IEEE Symposium on 3D User Interfaces (3DUI)*, 2015.

Technical Skills

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| Programming Languages | JavaScript, C++, C#, Java, R, Python |
| Programming Tools | D3.js, Node.js, OpenGL, OpenCV, ARToolkit, Unity3D |
| Digital Art Tools | 3ds Max, Blender |
| Electronics | Arduino |

Honors & Awards

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| 2017 | Participant , Doctoral Colloquium, IEEE VIS Conference | Phoenix, AZ, USA |
| 2015 | 1st Place , GRIE Poster Symposium Finals, WPI | Worcester, MA, USA |
| 2014 | Recipient , Research Poster Award, CS Department, WPI | Worcester, MA, USA |
| 2012 | Recipient , Google Anita Borg Scholarship, Google Inc. | Shanghai, China |
| 2011 | 1st Prize , Learning Scholarship, TJU | Shanghai, China |
| 2011 | Recipient , Santander-BCC Exchange Program Scholarship, TJU | Shanghai, China |
| 2010 | 3rd Prize , College Students' Programming Contest, TJU | Shanghai, China |

Service

VOLUNTEERING

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|------|------------------------------------------------------------|--------------------|
| 2016 | Student Volunteer , IEEE VIS Conference 2016 | Baltimore, MD, USA |
| 2015 | Volunteer , WPI High School Programming Competition | Worcester, MA, USA |
| 2015 | Student Volunteer , IEEE VR/3DUI Conference 2015 | Provence, France |
| 2014 | Student Volunteer , IEEE VR/3DUI Conference 2014 | Minnesota, MN |
| 2011 | Volunteer , Huangdu Elementary School | Shanghai, China |

REVIEWING

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| 2017 | ACM Conference on Tangible, Embedded and Embodied Interactions (TEI) |
| 2017 | IEEE Conference on Virtual Reality (VR) |