

Franklin Mingzhe Li

Education

Sept 2018 - Master of Science (Research Base),

present University of Toronto, Computer Science (GPA 4.0/4.0).

Aug 2013 - Bachelor of Applied Science,

May 2018 University of Toronto, Electrical Engineering.

April 2015 - Research Supervisor,

Present Dr. Khai N. Truong (Sept 2015 – Present)

Dr. Daniel J. Wigdor (May 2015 - Sept 2015).

Publications

Sept 2019 FMT: A Wearable Camera-Based Object Tracking Memory Aid for Older Adults

Franklin Mingzhe Li, Di Laura Chen, Mingming Fan, Khai N. Truong
In Proceedings of ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT),
2019.

Sept 2019 Face Recognition Assistant for People with Visual Impairments
Mohammad Kianpisheh, **Franklin Mingzhe Li**, Khai N. Truong
In Proceedings of ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT),
2019.

Oct 2017 BrailleSketch: A Gesture-based Text Input Method for People with Visual Impairments

Franklin Mingzhe Li, Mingming Fan, Khai N. Truong

In Proceedings of the 19th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS), 2017.

June 2016 The Living Room: Exploring the Haunted and Paranormal to Transform Design and Interaction Michelle Annett, Matthew Lakier, **Franklin Mingzhe Li**, Daniel Wigdor, Tovi Grossman, George Fitzmaurice

In Proceedings of the 2016 ACM Conference on Designing Interactive Systems (DIS), 2016.

Professional Experiences

May 2019 - Research Intern at Apple, Mentored by Dr. Jeffrey P. Bigham, and Dr. Xiaoyi Zhang,

Sept 2019 Worked on the research in Accessibility, and Machine Learning.

May 2016 - Analog Designer at AMD,

Aug 2017 Designed circuit test bench, Cadence layout & schematics, automating test bench, standard cell.

May 2015 - Research Intern at DGP Lab, Mentored by Dr. Daniel J. Wigdor, and Dr. Michelle Annett,

Aug 2015 Worked on the research in Human-Computer Interaction, and interaction techniques of multi-touch interfaces.

Research Directions and Methods

Human-Computer Interaction, Accessibility, Ubiquitous Computing, Quantitative and Qualitative Study, Participatory Design, Scenario-based Study.

Research Projects

- May 2019 Built a smart reminder of subway system based on contextual information (e.g., accelerometer, gyroscope, barometer) captured from smartphones and classified the data by using SVM to detect the state of the user and the train.
- Feb 2019 Built a Real-time face recognition system for people with visual impairment, and qualitatively evaluated the system with 10 participants with visual impairment (IMWUT 2019).
- Dec 2018 Developed a mobile system for older adults to recall states of objects through computer vision and evaluated the system through a scenario-based study with 12 older adults (IMWUT 2019).
- Sept 2018 Built a system for visually impaired people to read menus of restaurants and record daily calories.
- Aug 2018 Conducted interviews for people with disabilities on misperception of assistive devices in China.
- Apr 2017 Developed a gesture-based text input method for people with visual impairment to input on smartphones and conducted evaluation with 12 visually impaired people (ASSETS 2017).
- Jan 2016 Designed and developed a framework to assist the development of displays and objects that harness the unknown (DIS 2016).
- Jul 2015 Developed user identification of the DiamondTouch interface and used opengl to interpolate the data from the device.

Awards and Media Coverage

- Sept 2019 New Scientist: Where have I left my wallet? This smart camera can remind you.
- Sept 2018 Faculty of Arts And Science Tuition Fellowship, University of Toronto (\$18558).
- Nov 2018 Faculty of Arts And Science Program-Level Fellowship, University of Toronto (\$1000).
- Aug 2017 Markham Intern of the Year Award Nominee, AMD.
- Aug 2015 UTRECS Scholarship, University of Toronto (\$6000).
- 2013, 2014 Dean's List, University of Toronto.
- June 2013 Euclid Mathematics Competitions top 5% Awards, University of Waterloo.

Community Services and Teaching Experiences

- Dec 2019 Associate Chair, CHI 2020 Late Breaking Works.
- Sept 2019 Reviewer, CHI 2020 Full Paper: 2 papers.
- Jan 2019 Reviewer, CHI 2019 Late Breaking Works: 5 papers.
- Dec 2018 Human-Computer Interaction Meeting Organizer,
- May 2019 University of Toronto.
- Jan 2019 **Teaching Assistant**,
- April 2019 CSC258H1S: Computer Organization.
- Sept 2018 Teaching Assistant,
 - Dec 2018 CSC258H1F: Computer Orgainization.

Activities

- Sept 2016 Vice Chair,
 - May 2017 IEEE University of Toronto Student Branch.
- Sept 2014 Electronic Chapter Director.
 - May 2016 IEEE University of Toronto Student Branch.

Personal Interests

Cooking, Soccer, Hiking, Badminton, Swimming.