

Zhen Li

PERSONAL DATA

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EDUCATION

(Expected: Mar 2022)	Doctor of Philosophy in COMPUTER SCIENCE University of Toronto , Toronto, Canada
JUNE 2017	Master of Science in COMPUTER SCIENCE University of Toronto , Toronto, Canada AVERAGE GRADE: A+
JULY 2015	Bachelor of Engineering in COMPUTER SCIENCE Tsinghua University , Beijing, China GPA: 92/100 RANK: 4/123

PUBLICATIONS

Zhen Li, Joannes Chan, Joshua Walton, Hrvoje Benko, Daniel Wigdor, and Michael Glueck. 2021. Armstrong: An Empirical Examination of Pointing at Non-Dominant Arm-Anchored UIs in Virtual Reality. In *SIGCHI Conference on Human Factors in Computing Systems (CHI '21)*, May 08-13, 2021, Yokohama, Japan. <https://doi.org/10.1145/3411764.3445064>

Mingming Fan, **Zhen Li**, and Franklin Mingzhe Li. 2020. Eyelid Gestures on Mobile Devices for People with Motor Impairments. In *the 22nd International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '20)*, October 26-28, 2020, Virtual Event, Greece. <https://doi.org/10.1145/3373625.3416987>

Zhen Li, Mingming Fan, Ying Han, and Khai N. Truong. 2020. iWink: Exploring Eyelid Gestures on Mobile Devices. In *1st International Workshop on Human-centric Multimedia Analysis (HuMA '20)*, October 12, 2020, Seattle, WA, USA. <https://doi.org/10.1145/3422852.3423479>

Zhen Li, Michelle Annett, Ken Hinckley, Karan Singh and Daniel Wigdor. 2019. HoloDoc: Enabling Mixed Reality Workspaces that Harness Physical and Digital Content. In *SIGCHI Conference on Human Factors in Computing Systems Proceedings (CHI '19)*, May 4-9, 2019, Glasgow, Scotland UK. <https://doi.org/10.1145/3290605.3300917>

Zhen Li, Michelle Annett, Ken Hinckley and Daniel Wigdor. 2019. SMAC: A Simplified Model of Attention and Capture in Multi-Device Desk-Centric Environments. In *Proceedings of the ACM on Human-Computer Interaction (EICS '19)*, issue EICS, Article 2 (June 2019). <https://doi.org/10.1145/3300961>

Weinan Shi, Chun Yu, Xin Yi, **Zhen Li**, and Yuanchun Shi. TOAST: Ten-Finger Eyes-Free Typing on Touchable Surfaces. In *Proceedings of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (UBICOMP '18)*, Vol. 2, No. 1, Article 33 (March 2018). <https://doi.org/10.1145/3191765>

Julian Ramos, **Zhen Li**, Johana Rosas, Nikola Banovic, Jennifer Mankoff, and Anind Dey. Keyboard Surface Interaction: Making the Keyboard into a Pointing Device. Jan 2016. <http://arxiv.org/abs/1601.04029>

INTERNSHIPS

APR-SEP 2019	Armstrong: An Empirical Examination of Pointing at Non-Dominant Arm-Anchored UIs in Virtual Reality Supervised by Dr. Michael Glueck, Chatham Labs (now acquired by FRL) Investigated the performance and limitations of arm-anchored 3D UIs in VR environments and developed a Unity plugin for 3D UI designers. Research outcomes published at CHI 2021.
JUL-SEP 2014	Keyboard-Surface Interaction: Using the Keyboard's Surface as a Pointing Device Supervised by Prof. Anind K. Dey, HCI Institute, Carnegie Mellon University Designed the first stage of the user study and contributed to the gesture recognition using Wii Remote sensors.

SELECTED PROJECTS

Armstrong: An Empirical Examination of Pointing at Non-Dominant Arm-Anchored UIs in Virtual Reality (CHI '21)

Evaluated the performance and limitations of arm-anchored 3D UIs in VR environments through a bimanual pointing study and developed a series of design guidelines demonstrated through a Unity plugin to enable designers to create performance-optimized UI layouts.

HoloDoc: Enabling Mixed Reality Workspaces that Harness Physical and Digital Content (CHI '19)

Probed how users perform document-intensive analytical tasks when both physical and digital versions of documents were available and developed a mixed reality system that augments physical artifacts with rich interactions and dynamic virtual content.

SMAC: A Simplified Model of Attention and Capture in Multi-Device Desk-Centric Environment (EICS '19)

Explored the device ecologies used in desk-centric environments and compiled the insights observed into a simplified model of attention and capture that emphasized the role of *user-device* proxemics, as mediated by hand placement, gaze, and relative body orientation, as well as *inter-device* proxemics.

SCHOLARSHIPS AND AWARDS

MAR 2015	ST ENGINEERING China Scholarship
OCT 2014	Tsinghua – DONGSHI Dongfang Scholarship
AUG 2014	GOOGLE Excellence Scholarship
MAR 2014	ST ENGINEERING China Scholarship
OCT 2013	Tsinghua – ZHENG Geru Scholarship
MAR 2013	ST ENGINEERING China Scholarship
OCT 2012	Tsinghua – ZHANG Ronghua Scholarship

TEACHING

WINTER/FALL 2021 SUMMER/FALL 2020 WINTER/SUMMER/FALL 2019 WINTER 2016	Teaching Assistant INTRODUCTION TO COMPUTER SCIENCE, CSC108 Department of Computer Science, University of Toronto
WINTER 2020	Teaching Assistant THE DESIGN OF INTERACTIVE COMPUTATIONAL MEDIA, CSC318 Department of Computer Science, University of Toronto
WINTER/SUMMER/FALL 2018 WINTER/SUMMER/FALL 2017 SUMMER/FALL 2016	Teaching Assistant INTRODUCTION TO COMPUTER SCIENCE, CSC148 Department of Computer Science, University of Toronto
FALL 2011	Teaching Assistant FUNDAMENTALS OF PROGRAMMING, No.30240233 Department of Computer Science and Technology, Tsinghua University