

# Suwen Zhu

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New Computer Science Rm 140  
Stony Brook University  
Stony Brook, NY 11794  
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EDUCATION	<b>PhD Candidate</b> 2013/8 - Now <ul style="list-style-type: none"><li>Computer Science, Stony Brook University</li><li>Advisor: Assistant Professor Xiaojun Bi</li></ul>
	<b>Bachelor of Engineering</b> 2009/9 - 2013/7 <ul style="list-style-type: none"><li>Computer Science and Technology</li><li>Central University of Finance and Economics, Beijing, China</li></ul>
EXPERIENCE	<b>Research Assistant</b> 2016/8 - Now Stony Brook University Advisor: Prof. Xiaojun Bi <ul style="list-style-type: none"><li>Conducted research on human-computer interaction (HCI), including improving text entry system performance and designing novel interaction techniques for smartphones, wearable and VR/AR devices.</li></ul>
	<b>Software Engineer Intern in Research</b> 2016/5 - 2016/9 Google Supervisor: Dr. Xiaojun Bi, Dr. Shumin Zhai <ul style="list-style-type: none"><li>Conducted empirical studies to understand users' touch typing behaviors</li><li>Evaluated usability and learnability of invisible touchscreen keyboard</li></ul>
	<b>Research Assistant</b> 2014 - 2015 Stony Brook University Advisor: Prof. Long Lu <ul style="list-style-type: none"><li>Enabled module-level security enforcement for Android applications</li></ul>
	<b>Undergraduate Research Assistant</b> 2010 - 2011 Central University of Finance and Economics, Beijing, China Advisor: Prof. Yanmei Chai <ul style="list-style-type: none"><li>Digital watermarking principles and techniques</li></ul>
PUBLICATION	<p>[10] <b>i'sFree: Eyes-Free Gesture Typing via a Touch-Enabled Remote Control</b> Suwen Zhu, Jingjie Zheng, Shumin Zhai, Xiaojun Bi <i>CHI 2019</i></p> <p>[9] <b>Optimal-T9: An Optimized T9-like Keyboard for Small Touchscreen Devices</b> Ryan Qin<sup>1</sup>, Suwen Zhu, Yu-Hao Lin, Yu-Jung Ko, Xiaojun Bi <i>ISS 2018</i> <b>Honorable Mention Award</b></p> <p>[8] <b>Ultra-Low-Power Mode for Screenless Mobile Interaction</b> Jian Xu, Suwen Zhu, Aruna Balasubramanian, Xiaojun Bi, Roy Shilkrot <i>UIST 2018</i></p>

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<sup>1</sup>Ryan Qin is a high-school student supervised by Suwen Zhu.

- [7] **Why Is Gesture Typing Promising for Older Adults?: Comparing Gesture and Tap Typing Behavior of Older with Young Adults**  
Yu-Hao Lin, **Suwen Zhu**, Yu-Jung Ko, Wenzhe Cui, Xiaojun Bi  
*ASSETS 2018*
- [6] **Computational Layout Design for Keyboards with Multi-Letter Keys** Ryan Qin, **Suwen Zhu**, Yu-Hao Lin, Yu-Jung Ko, Xiaojun Bi  
MobileHCI 2018 Workshop on Socio-Technical Aspects of Text Entry
- [5] **Towards virtual reality infinite walking: dynamic saccadic redirection**  
Qi Sun, Anjul Patney, Li-Yi Wei, Omer Shapira, Jingwan Lu, Paul Asente, **Suwen Zhu**, Morgan Mcguire, David Luebke, Arie Kaufman  
*SIGGRAPH 2018*
- [4] **Typing on an Invisible Keyboard**  
**Suwen Zhu**, Tianyao Luo, Xiaojun Bi, Shumin Zhai  
*CHI 2018*  
**CHI 2018 Technical Papers Teaser**
- [3] **CASE: Comprehensive Application Security Enforcement on COTS Mobile Devices**  
**Suwen Zhu**, Long Lu, Kapil Singh  
*MobiSys 2016*
- [2] **The Survey on Applications of Information Hiding Technology in E-Commerce Security**  
Yanmei Chai, **Suwen Zhu**, Wenying Han  
Applied Mechanics and Materials 2013
- [1] **An Improved Self-Adaptive Digital Watermarking Algorithm for RGB Images Based on W-SVD**  
**Suwen Zhu**, Bingxin Liu, Yanmei Chai  
IEEE Proceedings of International Conference on Management of e-Commerce and e-Government 2012

## TEACHING/ MENTORING

### Guest Lecturer

Stony Brook University

CSE 591: Advanced Topics in Mobile Human Computer Interaction      Fall 2018

### Mentor

Stony Brook University

Computer Science and Informatics Summer Research Experience Program

Advisee:

Ryan Qin, Ward Melville High School

2017/7 - 2018/12

Jennifer Luo, Great Neck South High School

2018/7 - Now

### Teaching Assistant

Stony Brook University

CSE 594: Advanced Topics in Human Computer Interaction

Spring 2018

CSE 509: Computer System Security

Fall 2016

CSE 508: Network Security

Spring 2016

CSE 532: Theory of Database Systems

Spring 2014

CSE 110: Introduction to Computer Science

Fall 2013

<b>AWARDS</b>	<b>Stony Brook Computer Science Fellowship</b> <i>Stony Brook University</i>	2013-2014
	<b>Honor Graduate of Beijing</b>	2013
	<b>Academic Excellence Award</b> <i>Central University of Finance and Economics, Beijing</i>	2012
	<b>Dean's Honor Scholarship</b> <i>School of Information, Central University of Finance and Economics, Beijing</i>	2010, 2012, 2013
<b>PRESS</b>	<b>Towards Virtual Reality Infinite Walking</b> SIGGRAPH blog, BBC Click, EurekAlert, IEEE, NVIDIA News, Road to VR, Hackaday, VRFocus, VR World, Inverse, ScienceDaily, ScienceBriefss, Digital Trends, Boing Boing, New Atlas, Bit-Tech, VRrOOM, Two Minute Papers, Sohu.com, etc.	
	<b>Comprehensive Application Security Enforcement on COTS Mobile Devices</b> Stony Brook Happenings	