

# Xiaoyi Zhang

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## education

- 2014 - Now     **PhD Student**, Computer Science & Engineering     University of Washington, Seattle  
Advised by Prof. James Fogarty
- 2011 - 2014     **Bachelor**, Computer Science     University of California, Los Angeles  
Advised by Prof. Majid Sarrafzadeh
- Research     **HCI, Accessibility, Personal Informatics, Wireless Health, CV, AR**

## publications

(PDF available at [www.XiaoyiZhang.me](http://www.XiaoyiZhang.me))

- Conference     **Interaction Proxies for Runtime Repair and Enhancement of Mobile Application Accessibility**  
**X. Zhang, A. Ross, A. Caspi, J. Fogarty, J. O. Wobbrock**  
CHI 2017
- Smartphone-Based Eye Gesture Communication for People with Motor Disabilities**  
**X. Zhang, H. Kulkarni, M. R. Morris**  
CHI 2017
- Examining Unlock Journaling with Diaries and Reminders for In Situ Self-Report in Health and Wellness**  
**X. Zhang, L. Pina, J. Fogarty**  
CHI 2016
- Leveraging Dual-Observable Input for Fine-Grained Thumb Interaction Using Forearm EMG**  
**D. Huang, X. Zhang, TS. Saponas, J. Fogarty, S. Gollakota**  
UIST 2015
- See UV on Your Skin: An Ultraviolet Sensing and Visualization System**  
**X. Zhang, W. Xu, M-C. Huang, F. Ren, N. Amini**  
BodyNets 2013
- Proper Running Posture Guide: A Wearable Biomechanics Capture System**  
**X. Zhang, M-C. Huang, F. Ren, W. Xu, N. Guan, W. Yi**  
BodyNets 2013
- Journal        **FridgeNet: A Nutrition and Social Activity Promotion Platform for Aging Population**  
*Y. Lee, M-C Huang, X. Zhang, W. Xu*  
Intelligent Systems, IEEE 30 (4)
- BreathSens: A Continuous On-Bed Respiratory Monitoring System With Torso Localization Using an Unobtrusive Pressure Sensing Array**  
*J. Liu, M-C Huang, W. Xu, X. Zhang, L. Stevens, N. Alshurafa, M. Sarrafzadeh*  
Biomedical and Health Informatics, IEEE Journal of 19 (5)
- Using Pressure Map Sequences for Recognition of On Bed Rehabilitation Exercises**  
*M-C. Huang, J. Liu, W. Xu, N. Alshurafa, X. Zhang, M. Sarrafzadeh*  
Biomedical and Health Informatics, IEEE Journal of 18 (2)
- Workshop     **Toward a Portable, Self-administered Critical Flicker Frequency Test**  
*R. Karkar, R. Kocielnik, X. Zhang, J. Fogarty, G N. Ioannou, S A. Munson, J. Zia*  
Ubicomp Mental Health Workshop 2016
- EZwakeup: A Sleep Environment Design for Sleep Quality Improvement**  
*M-C. Huang, X. Zhang, W. Xu, J. Liu, M. Sarrafzadeh*  
CHI Extended Abstract 2014
- Patent        **USER INTERFACE CONTROL USING GAZE TRACKING**  
*K. Kohlhoff, X. Zhang*  
WO 2015164584, US 20150309569

## experience

Paper Review	<b>2017 - CHI / Mobile HCI / DIS</b> <b>2016 - UIST / CHI EA</b> Being invited to review 10 conference papers.	
2016	<b>MICROSOFT RESEARCH</b> <i>Research Intern in Enable Team</i> Built a low-cost, robust, easy-to-learn&fast eye gesture communication phone app for people with ALS.	Redmond, WA
2015	<b>GOOGLE RESEARCH</b> <i>Research Intern in Machine Intelligence group</i> Developed 3 new features in coLaboratory(Collborative iPython Notebook).	Mountain View, CA
2014	<b>MOVNPIC</b> <i>Co-founder &amp; Chief Creative Officer</i> Design & Develop an iOS app to create Interactive images.	Los Angeles, CA
2013	<b>GOOGLE RESEARCH</b> <i>Research Intern in Computer Vision &amp; HCI group</i> Built non-rigid face features detection, pose & gaze tracking used by 3 teams.	Mountain View, CA
2012	<b>APPLE</b> <i>Software Engineering Intern in iCloud</i> Implemented 1 new feature, improved UX of web apps and fixed 47 bugs.	Cupertino, CA
2011 - 2013	<b>SUNSHINE LIBRARY</b> <i>Developer &amp; Webmaster</i> Charitable rural information education using low-cost Android Tablet like OLPC.	Gansu, China
2011 - 2012	<b>TALKWAYS</b> <i>Co-founder &amp; ex-CTO</i> Video chat platform to learn language with culture; received ¥5M investment.	Beijing, China
2011	<b>DEMOHOUR</b> <i>Sponsor &amp; Developer of "Gesture@Mac"</i> Initiate the first project on Demohour, the largest crowd-funding platform in China now.	Beijing, China

## media coverage

02/2017	<b>Microsoft App Helps People with ALS Speak Using Just Their Eyes</b> Editor's Pick. <a href="https://www.newscientist.com/article/2121579">https://www.newscientist.com/article/2121579</a> This research is also reported by The Telegraph / BGR / Business Standard / MSPoweruser / cnBeta	New Scientist
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## awards

09/2014	<b>Corin Anderson Endowed Fellowship</b> One recipient in UW CSE Dept.	University of Washington
02/2014	<b>New Face of Engineering College Edition</b> Fifteen recipients across US; nominated by IEEE.	National Society of Professional Engineers
09/2013	<b>Student Participation Grant</b> Gave two talks at Bodynets conference.	European Alliance for Innovation
04/2013	<b>Grand Prize, Best Mobile App &amp; Best Data Viz Prize</b> Project EyeWeight won \$7500; selected by Eytan Elbaz (Google AdSense founder).	LA Hacks, 40+ teams
04/2013	<b>Second Place</b> Project AResume was appreciated by Facebook recruiter.	Facebook Hackathon, 250+ participants
10/2012	<b>Grand Prize &amp; Tech Difficulty Prize</b> Project Music++ won \$33000; selected by Howard Marks (Activision founder).	HackUCLA, 20+ teams