

# Tianxing Li

- Address: Lab 151 Sudikoff Building, Dartmouth College, NH 03755
- E-mail: [tianxing@cs.dartmouth.edu](mailto:tianxing@cs.dartmouth.edu) • Website: <http://cs.dartmouth.edu/~ltx/>

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## EDUCATION

July. 2014- Present	<b>DARTMOUTH COLLEGE</b> <i>Ph.D., Computer Science</i> Advisor: Prof. Xia Zhou	Hanover, NH
Sept. 2012- Jun. 2014	<b>DARTMOUTH COLLEGE</b> <i>Master, Computer Science</i> Overall GPA: 3.6/4.0	Hanover, NH
Oct. 2009-Dec. 2011	<b>AUSTRALIAN NATIONAL UNIVERSITY</b> <i>Bachelor, Electronics and Telecommunications Engineering(Major), Photonics (Minor)</i> Overall GPA: 3.3/4.0 Major GPA: 3.4/4.0, Ranking: 19/213	ACT, Australia
Sept. 2007-Sept. 2009	<b>BEIJING INSTITUTE OF TECHNOLOGY</b> <i>Bachelor, Electronics and Telecommunications Engineering</i> Overall GPA: 3.6/4.0, Ranking: 9/66	Beijing, China

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## HONORS & AWARDS

- CACM Research Highlights Award 2018
- SIGMOBILE Research Highlights Award 2018
- Best Paper Nominee Award at Sensys 2017
- SIGMOBILE Research Highlights Award 2016
- Best Video Award at MobiCom 2015
- 3rd place of Neukom Prize for Outstanding Graduate Research at Dartmouth College
- Best Demo Award at MobiSys 2015
- Bronze Medal of Student Research Competition at MobiCom 2014
- Best Paper Award at VLCS 2014
- Best Paper Nominee Award at UbiComp 2014
- International Student Scholarship (Top 20 out of 213), Australian National University, 2010 and 2011

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## CONFERENCE AND WORKSHOP PAPERS

- Battery-Free Eye Tracker on Glasses  
**Tianxing Li** and Xia Zhou  
ACM MobiCom 2018
- Self-Powered Gesture Recognition with Ambient Light  
Yichen Li\*, **Tianxing Li**\*, Ruchir A. Patel, Xing-Dong Yang, and Xia Zhou (\* co-primary)  
ACM UIST 2018
- Ultra-Low Power Gaze Tracking for Virtual Reality  
**Tianxing Li**, Qiang Liu, and Xia Zhou  
ACM SenSys 2017
- Reconstructing Hand Poses Using Visible Light  
**Tianxing Li**\*, Xi Xiong\*, Yifei Xie, George Hito, Xing-Dong Yang, and Xia Zhou (\* co-primary)  
ACM UbiComp 2017
- Practical Human Sensing in the Light  
**Tianxing Li**, Qiang Liu, and Xia Zhou  
ACM MobiSys 2016
- Human Sensing Using Visible Light Communication  
**Tianxing Li**, Chuankai An, Zhao Tian, Andrew T. Campbell, and Xia Zhou

ACM MobiCom 2015

Visible Light Knows Who You Are

Chuankai An, **Tianxing Li**, Zhao Tian, Andrew T. Campbell, and Xia Zhou  
ACM VLCS 2015

Low-Power Pervasive Wi-Fi Connectivity Using WiScan

**Tianxing Li**, Chuankai An, Ranveer Chandra, Andrew T. Campbell, and Xia Zhou  
ACM UbiComp 2015

Real-time screen-camera communication behind any scene

**Tianxing Li**, Chuankai An, Xinran Xiao, Andrew T. Campbell, and Xia Zhou  
ACM MobiSys 2015

HiLight: Hiding Bits in Pixel Translucency Changes

**Tianxing Li**, Chuankai An, Andrew Campbell, and Xia Zhou  
ACM VLCS 2014

StudentLife: Assessing Behavioral Trends, Mental Well-being and Academic Performance of College Students using Smartphones

Rui Wang, Fanglin Chen, Zhenyu Chen, **Tianxing Li**, Gabriella Harari, Stefanie Tignor, Xia Zhou, Dror Ben-Zeev, and Andrew T. Campbell  
ACM UbiComp 2014

Unobtrusive sleep monitoring using smartphones

Zhenyu Chen, Mu Lin, Fanglin Chen, Lane, N.D., Cardone, G., Rui Wang, **Tianxing Li**, Yiqiang Chen, Choudhury, T. Campbell, A.T.  
Pervasive Health 2013

Dual deblurring leveraged by image matching

Fang Wang, **Tianxing Li**, Yi Li  
IEEE ICIP 2013

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## JOURNALS

Practical Human Sensing in the Light

**Tianxing Li**, Qiang Liu, and Xia Zhou  
ACM GetMobile 20 (4): 28-33 (2016)

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## POSTER AND DEMOS

Demo: Ultra-Low Power Gaze Tracking for Virtual Reality

**Tianxing Li**, Emmanuel S. Akosah, Qiang Liu, and Xia Zhou,  
ACM SenSys 2017

Demo: Real-Time Screen-Camera Communication Behind Any Scene

**Tianxing Li**, Chuankai An, Xinran Xiao, Andrew T. Campbell, and Xia Zhou,  
ACM MobiSys 2015

Poster: HiLight: Hiding Bits In Pixel Translucency Changes

**Tianxing Li**, Chuankai An, Andrew T. Campbell, and Xia Zhou,  
ACM MobiCom 2014

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## INVITED TALKS

**S3 2018** (in conjunction with ACM MobiCom 2018)

Talk: Battery-free Eye Trackers  
New Delhi, India

**SCIE 2017** (in conjunction with IEEE SECON 2017)

Talk: Human Sensing Using Visible Light  
San Diego, CA, USA

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## ACTIVITIES

Co-chairs

- ACM S3 2017 workshop (in conjunction with ACM MobiCom 2017)
- ACM Ph.D. Forum 2017 workshop (in conjunction with ACM MobiSys 2017)

TPC members

- CRYBLOCK 2018 workshop (in conjunction with ACM MobiSys 2018)
- ACM Ph.D. Forum 2018 workshop (in conjunction with ACM MobiSys 2018)
- ACM S3 2016 workshop (in conjunction with ACM MobiCom 2016)
- ACM Ph.D. Forum 2016 workshop (in conjunction with ACM MobiSys 2016)

Reviewers

- IMWUT
- IEEE Wireless Communication Letters
- IEEE Transactions on Mobile Computing
- Computers
- UbiComp 2015, 2016
- Mobile Information System

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## RESEARCH EXPERIENCES

- Mar. 2011- Mar.2012    **NATIONAL ICT CENTRE & AUSTRALIA NATIONAL UNIVERSITY**    ACT, Australia  
*Dual deblurring leveraged by image matching*, *Computer Vision Group*  
 Advisor: Dr. Yi Li
- Nov. 2010- Mar.2011    **NATIONAL ICT CENTRE & AUSTRALIA NATIONAL UNIVERSITY**    ACT, Australia  
*Kernel-based Tracking from a Probabilistic Viewpoint*, *Computer Vision Group*  
 Advisor: Dr. Antonio Robles-Kelly

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## TEACHING EXPERIENCES

### Guest Lecturer

**Course:** Operating System (CS58), Fall 2018, Dartmouth College

### Teaching Assistant

**Course:** Computer Network (CS60), Spring 2014, Dartmouth College

### Teaching Assistant

**Course:** Software Design and Implementation (CS50), Winer 2014, Dartmouth College

### Teaching Assistant

**Course:** Introduction to Bioinformatics (CS75), Fall 2014, Dartmouth College

### Teaching Assistant

**Course:** Smartphone programming (CS65), Spring 2013, Dartmouth College

### Tutor

**Course:** Digital Systems and Microprocessors (ENGN3213), Fall 2011, Australian National University