

Tianshi Li

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Academic Positions **Northeastern University** Boston, MA
Visiting Assistant Professor May 2023 – Present
Assistant Professor starting in June 2024
University of California, Berkeley Boston, MA
Postdoctoral Scholar September 2023 – Present

Education **Carnegie Mellon University** Pittsburgh, PA
PhD in Human-Computer Interaction Sept. 2016 – May 2023
Advisor: [Prof. Jason Hong](#)
Thesis Committee: Jason Hong (Chair), Lorrie Cranor, Brad Myers, Yuvraj Agarwal (CMU S3D), Tadayoshi Kohno (University of Washington)

Peking University Beijing, China
B.S. in Computer Science, Summa Cum Laude Sept. 2012 – July. 2016

Honors and Grants Best research papers 2019-2021 Award, Pervasive and Mobile Computing 2023
CMU CyLab Seed Funding (PI, \$45,000) 2023
Rising Stars in EECS Workshop 2022
Best Paper Honorable Mention, CHI'22 2022
CMU CyLab Presidential Fellowship 2021
PEPR'20 Diversity Grant 2020
Outstanding Graduate Award, Beijing 2016
Outstanding Graduate Award, Peking University 2016
ACM-ICPC Asia Regional Chengdu Site Gold Medal 2013
ACM-ICPC Asia Regional Chengdu Site Best Women Team 2013

Peer-reviewed conference and journal papers [C.14] **ReactGenie: A Development Framework for Complex Multi-modal Interactions Using Large Language Models**
Jackie (Junrui) Yang, Yingtian Shi, Karina Li, Daniel Wan Rosli, Shuning Zhang, Yuhan Zhang, Anisha Jain, *Tianshi Li*, Monica Lam, James A. Landay.
to appear at CHI 2024

[C.13] **“It’s a Fair Game”, or Is It? Examining How Users Navigate Disclosure Risks and Benefits When Using LLM-Based Conversational Agents**
Zhiping Zhang, Michelle Jia, Hao-Ping (Hank) Lee, Bingsheng Yao, Sauvik Das, Ada Lerner, Dakuo Wang, *Tianshi Li*.
to appear at CHI 2024

[C.12] Matcha: An IDE Plugin for Creating Accurate Privacy Nutrition Labels

Tianshi Li, Lorrie Faith Cranor, Yuvraj Agarwal, Jason I. Hong.
to appear at IMWUT 2024/ UbiComp 2024

[C.11] Understanding Challenges for Developers to Create Accurate Privacy Nutrition Labels 🏆

Tianshi Li, Kayla Reiman, Yuvraj Agarwal, Lorrie Faith Cranor, Jason I. Hong.
Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems (CHI 2022)
Best Paper Honorable Mention Award.

[C.10] C-PAK: Correcting and Completing Variable-length Prefix-based Abbreviated Keystrokes

Tianshi Li, Philip Quinn, Shumin Zhai.
ACM Transactions on Computer-Human Interaction (TOCHI), 2022

[C.9] Charting App Developers' Journey Through Privacy Regulation Features in Ad Networks

Mohammad Tahaei, Kopo M. Ramokapane, Tianshi Li, Jason I. Hong, Awais Rashid.
Proceedings on Privacy Enhancing Technologies (PETS) 2022

[C.8] Understanding Privacy-Related Advice on Stack Overflow

Mohammad Tahaei, Tianshi Li, Kami Vaniea.
Proceedings on Privacy Enhancing Technologies (PETS) 2022

[C.7] Honeysuckle: Annotation-Guided Code Generation of In-App Privacy Notices

Tianshi Li, Elijah B. Neundorfer, Yuvraj Agarwal, Jason I. Hong.
Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, Volume 5 Issue 3, 2021 (IMWUT 2021/ UbiComp 2021)

[C.6] Alert Now or Never: Understanding and Predicting Notification Preferences of Smartphone Users

Tianshi Li, Julia Katherine Haines, Miguel Flores Ruiz de Eguino, Jason I. Hong, Jeffrey Nichols.
ACM Transactions on Computer-Human Interaction (TOCHI), 2021

[C.5] What Makes People Install a COVID-19 Contact-Tracing App? Understanding the Influence of App Design and Individual Difference on Contact-Tracing App Adoption Intention 🏆

Tianshi Li, Camille Cobb, Jackie (Junrui) Yang, Sagar Baviskar, Yuvraj Agarwal, Beibei Li, Lujo Bauer, Jason I. Hong.

Special Issue on IoT for Fighting COVID-19 of Elsevier Pervasive and Mobile Computing (PMC) Journal, 2021

Best research papers 2019-2021 Award

[C.4] How Developers Talk about Personal Data and What It Means for User Privacy: A Case Study of a Developer Forum on Reddit

Tianshi Li, Elizabeth Louie, Laura Dabbish, and Jason I. Hong.

Proceedings of the ACM on Human-Computer Interaction, 4, CSCW3, 2021

[C.3] Coconut: An IDE plugin for developing privacy-friendly apps

Tianshi Li, Yuvraj Agarwal, and Jason I. Hong.

Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, Volume 2 Issue 4, 2018 (IMWUT 2018/ UbiComp 2019)

[C.2] Demystifying Complex Workload-DRAM Interactions: An Experimental Study

Saugata Ghose, *Tianshi Li*, Nastaran Hajinazar, Damla Senol Cali, Onur Mutlu.

Proceedings of the ACM on Measurement and Analysis of Computing Systems (SIGMETRICS), 2019

[C.1] Understanding Latency Variation in Modern DRAM Chips: Experimental Characterization, Analysis, and Optimization

Kevin K. Chang, Abhijith Kashyap, Hasan Hassan, Saugata Ghose, Kevin Hsieh, Donghyuk Lee, *Tianshi Li*, Gennady Pekhimenko, Samira Manabi Khan, Onur Mutlu.

SIGMETRICS 2016

SIG/Workshop

[S.1] Shaping the Emerging Norms of Using Large Language Models in Social Computing Research

Hong Shen, *Tianshi Li*, Toby Jia-Jun Li, Joon Sung Park, Diyi Yang.

CSCW 2023 Special Interest Groups (SIG)

Preprints

[P.2] Decentralized is not risk-free: Understanding public perceptions of privacy-utility trade-offs in COVID-19 contact-tracing apps

Tianshi Li, Jackie (Junrui)Yang, Cori Faklaris, Jennifer King, Yuvraj Agarwal, Laura Dabbish, Jason I. Hong.

in arXiv preprint, arXiv:2005.11957, 2020

[P.1] Using ECC DRAM to Adaptively Increase Memory Capacity

Yixin Luo, Saugata Ghose, *Tianshi Li*, Sriram Govindan, Bikash Sharma, Bryan Kelly, Amirali Boroumand, Onur Mutlu.

in arXiv preprint, arXiv:1706.08870, 2017

Lightly reviewed
papers

[W.4] Analyzing Developers' Perceptions, Attitudes and Challenges in Complying with Mobile App Store Privacy Requirements

Geetika Gopi, Peter Meyers, Thanyanun Charoensiritanasin, Jayson Jin, Ragashree Mysuru Chandrashekar, Lorrie Faith Cranor, *Tianshi Li*
SOUPS 2023 Poster

[W.3] Measuring the Effectiveness of Spinner-based Randomized-Response Differential Privacy Communication for Sensitive Data Sharing

Seoyoung Ko, Sriram Viswanathan, Alan Esquenazi, Swadhin Routray, Jatan Loya, *Tianshi Li*, Lorrie Faith Cranor
SOUPS 2023 Poster
Workshop on Privacy Engineering in Practice (PEP '23)

[W.2] Understanding iOS Privacy Nutrition Labels: An Exploratory Large-Scale Analysis of App Store Data

Yucheng Li, Deyuan Chen, *Tianshi Li*, Yuvraj Agarwal, Lorrie Faith Cranor, Jason I. Hong.
CHI 2022 Late-Breaking Work

[W.1] Analyzing the Role of General App Creators in Protecting the Privacy of Vulnerable Populations

Tianshi Li, Jason I. Hong.
CHI 2020 Workshop: Privacy and Power: Acknowledging the Importance of Privacy Research and Design for Vulnerable Populations

Industry experiences

Google Inc.

Pittsburgh, PA

Research intern

March 2019 – May 2019

Mentor: [Dr. Jeffrey Nichols](#)

Google Inc.

Mountain View, CA

Software Engineering Intern, Ph.D.

May 2018 – August 2018

Mentor: [Dr. Shumin Zhai](#)

Google Inc.

Mountain View, CA

Software Engineering Intern, Ph.D.

May 2017 – August 2017

Mentor: [Dr. Jeffrey Nichols](#)

Google Inc.

Beijing, China

Engineering Practicum Intern

July 2014 – November 2014

Teaching experience

Teaching assistant, HCII (CMU)

Fall 2021

05-610: User-Centered Research and Evaluation

This is an introductory course for HCI/UX research methods. My responsibilities included grading assignments and exams, preparing teaching materials, giving recitation lectures every week about UX design methods and practices, helping students define and conduct UX research projects, and holding office hours.

Teaching assistant, HCII (CMU)

Fall 2019

05-630: Programming User Interfaces

This course is a combination of programming course and design studio. My responsibilities included grading assignments and exams, preparing teaching materials, giving weekly recitation lectures focused on the programming part (web development), and holding office hours.

Academic service

Co-Chair

2024: NDSS Poster Session

Program Committee Member

2023: USEC'24, CSCW'24, CHI'24, ICML 2023 Workshop AI & HCI, Oakland'23 Poster

2022: USENIX Security'22, CHI'22 Late-Breaking Work

External Reviewer

🏆 Received "special recognitions" for outstanding reviews for ACM CHI 2021, 2022, ACM CSCW 2021, and ACM DIS 2021.

2023: IDC 2023, CSCW 2023, PoPETs 2023, IMWUT 2023, IEEE S&P magazine, ACM TOSEM

2022: IMWUT 2022, UIST 2022, CHI 2023

2021: CHI 2022, CSCW 2021&2022, DIS 2021, CHI LBW 2021, BMJ 2021

2020: CHI 2021, CHI Case Studies 2021, ACM DTRAP

2019: CHI Case Studies 2020

2018: TOPS 2019, CHI LBW 2019

2017: IMWUT 2018

Institutional service

Ph.D. admission committee member, HCII, CMU

December 2022

Co-organizer, HCII-LTI social computing reading group, CMU

2019 to 2020

Invited talks

Exploring Privacy Issues in Human-LLM Interactions

UIUC Security Seminar (virtual visit)

October 2023

Protecting User Privacy by Helping Developers

UCLA, ECE (Yuan Tian's Lab)

June 2023

University of Michigan, CSE

March 2023

FTC, Division of Privacy and Identity Protection

March 2023

Google Android Security and Privacy

March 2023

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| Northeastern University, CS | Feb 2023 |
| Georgia Tech, School of Cybersecurity and Privacy | Feb 2023 |
| University of Toronto, FORCO Lab (ECE) | Feb 2023 |
| University of Minnesota Twin Cities, CSE | Feb 2023 |
| Purdue University, CS | Feb 2023 |
| Stanford HCI Lunch | Feb 2023 |
| George Washington University, GWUSEC Lab | Jan 2023 |

Matcha: an IDE Plugin for Creating Accurate Privacy Nutrition Labels
presented at UNC Charlotte ITIS 4420 (guest speaker) March 2023
presented at UNC Charlotte ITIS 4420 (guest speaker) October 2022
presented at 2022 CMU CyLab Partners Conference October 2022

Understanding Challenges for Developers to Create Accurate Privacy Nutrition Labels
presented to the [ACT – The App Association](#), a trade association representing over 5,000 application software developers and small and mid-sized technology companies in the U.S. and Europe May 2022
presented at the [CATCUS/P Colloquium](#) May 2022
presented at CHI 2022 May 2022

Alert Now or Never: Understanding and Predicting Notification Preferences of Smartphone Users
presented at CHI 2022 May 2022

Annotation-Guided IDE plugins for Building Privacy-Friendly Apps
presented at 2021 CMU CyLab Partners Conference October 2021

Honeysuckle: Annotation-Guided Code Generation of In-App Privacy Notices
presented at UbiComp 2021 September 2021

PhraseWriter: Error-Tolerant Abbreviated Phrase Input for Mobile Text Input
presented at Google SpeakFaster Group August 2021

Understanding the Influence of App Design and Individual Difference on Contact-Tracing App Adoption Intention
presented at MIT PACT Lab May 2021

How Developers Talk about Personal Data and What It Means for User Privacy: A Case Study of a Developer Forum on Reddit
presented at CSCW 2020 October 2020

Coconut: An IDE Plugin for Developing Privacy-Friendly Apps

presented at UbiComp 2019

September 2019

Media coverage

[What your Android phone's new "data safety" labels mean](#)

The Washington Post. Chris Velazco. May 5, 2022

[CyLab researchers investigate Apple's privacy labels](#)

CMU CyLab news. Daniel Tkacik. April 28, 2022

[Google Adds Privacy Labels to Apps. But Will They Help?](#)

Consumer Reports. Thomas Germain. April 26, 2022

[Perception of Privacy-Utility Tradeoffs in Contact-Tracing Apps Key to Widespread Adoption](#)

CMU HCII news. June 5, 2020

[HCII Responds to the Pandemic](#)

CMU HCII news. May 29, 2020

[This new tool for developers can help preserve app users' privacy](#)

Tech Xplore. Daniel Tkacik. October 7, 2019

[This new tool for developers can help preserve app users' privacy](#)

CMU CyLab news. Daniel Tkacik. October 4, 2019

Current students

Ragashree Mysuru Chandrashekar (2023 Summer – Present, CMU master's student)

Geetika Gopi (2023 Summer – Present, CMU master's student)

Zhiping Zhang (2023 Summer – Present, Northeastern Research Assistant)

Past students

Yuvanshu Agarwal (2023 Spring, CMU undergrad)

Lillian Hao (2023 Spring, CMU undergrad)

Ziqi Pan (2022 Fall – 2023 Spring, Tsinghua University undergrad)

Prerit Pathak (2022 Fall – 2023 Spring, CMU master's student)

Ashley (Chuoqiao) Lin (2022 Fall, CMU Decision Science undergrad)

Menghan Liu (2022 Fall, CMU Cognitive Science undergrad)

Julia (Juran) Zhang (2022 Fall, CMU SCS undergrad)

Oliver Jin (2022 Summer and Fall, UCI undergrad)

Margaret He (2022 Spring – 2023 Spring, CMU SCS undergrad)

Yucheng Li (2021 Fall – 2022 Fall, CMU master's student)

Shuo Jin (2021 Fall, CMU undergrad)

Deyuan Chen (2021 Summer, CMU master's student)

Kayla Reiman (2021 Summer, CMU master's student)

Ginny (Yuanfei) Zhao (2021 Spring, CMU SCS undergrad)

Sam Yong (2020 Spring, CMU SCS undergrad)

Elizabeth Louie (2020 Spring, CMU SCS undergrad)

Haley Park (2019 Fall, CMU MHCI)

Elijah Neundorfer (2019 Summer, Columbus State undergrad)

Tiffany Yu (2019 Spring & Fall, CMU SCS undergrad)