RESEARCH STATEMENT

I am a Human-Computer Interaction (HCI) researcher working at the intersection of Personal Informatics, Health Informatics, and Ubiquitous Computing. Motivated by the power of self-tracking to enable positive behavior change through facilitating self-reflection, I design, build, and evaluate multimodal self-tracking systems to support rich, low-burden, and reflective data capture. My dissertation examines how speech input complements the traditional touch input in capturing personal data that are closely related to people’s health and well-being, including exercise, food practice, and productivity. Taking a mix of qualitative and quantitative approaches, my work contributes to empirical understandings of how people practice self-tracking using natural language, and provides practical recommendations for combining multimodal data input to support capturing different types of personal data.

EDUCATION

2017–Present
University of Maryland, College Park, MD
Ph.D. in Information Studies
Thesis: Promoting Rich and Low-Burden Self-Tracking Through Multimodal Data Input
Advisor: Eun Kyoung Choe
Committee members: Bongshin Lee, Hernia Kacorri, Beth St. Jean, Philip Resnik

2015–2017
The Pennsylvania State University, State College, PA
M.S. in Information Science & Technology

2011–2015
Southeast University, Nanjing, China
B.E. in Computer Science

EMPLOYMENT

06/2020–08/2020
Facebook (Enterprise People Engineering), Menlo Park, CA
User Experience Researcher Intern
Host: Dipanwita Dasgupta

05/2019–08/2019
Google (Android Developer Platform), Mountain View, CA
User Experience Researcher Intern
Host: Preethi Srinivas

08/2017–Present
University of Maryland, College Park, MD
Graduate Research Assistant

06/2016–08/2016
Mode Media, Brisbane, CA
User Experience Designer Intern

01/2016–05/2016
The Pennsylvania State University, State College, PA
Graduate Research Assistant

06/2014–08/2014
FASTEM Studio, Nanjing, China
Software Engineer Intern

HONORS AND AWARDS

2021
Dr. Joan Giesecke Health Informatics Fellowship, University of Maryland ($5,000)
2020  
iSchool Research Improvement Grants (RIGs), University of Maryland ($1,400)  
Outstanding Gradaute Assistant Award (top 2%), University of Maryland

2019  
Dean's Award for iSchool Doctoral Student Paper [c4], University of Maryland  
HCIL Conference Travel Award, University of Maryland ($700)  
Jacob K. Goldhaber Travel Grant, University of Maryland ($600)

2018  
iSchool Research Improvement Grants (RIGs), University of Maryland ($1,086)

2017  
Selected Attendee in Health Data Exploration (HDE) Summer Institute with travel grant

2014  
Outstanding Award in Literary and Artistic Activities, Southeast University

2011  
Best Student Debater in the College of Computer Science, Southeast University

PUBLICATIONS

* denotes equal contribution.

Conference Proceedings (Rigorously Peer Reviewed)


c3  Blair, J., Luo, Y., Ma, N.F., Lee, S.Y., Choe, E.K. (2018). **OneNote Meal: A Photo-Based Diary Study for Reflective Meal Tracking**. *Proceedings of the American Medical Informatics Association (AMIA '18).*


Journal Articles (Rigorously Peer Reviewed)


Doctoral Colloquium Papers (Refereed)


CREATIVE COMPUTING SYSTEMS

cs2 **TandemTrack.** A multimodal system consisting of an Android app and an Alexa skill on Amazon Echo devices to support in-home exercise tracking [c5]. Contributors: Luo Y., Lee B., Choe, E.K., Smolyak, D.

cs1 **Time for Break.** A desktop-based application (Windows) that prompts knowledge workers to take regular standing breaks [c2]. Contributors: Luo Y., Lee B., Conroy D.E., Choe, E.K.

TEACHING EXPERIENCE

University of Maryland

INST 408D Special Topic: Designing Patient-Centered Technologies
Undergraduate level; Elective; 3 credits; 23 enrollment
- Spring 2021 Instructor of Record
  Responsibilities: designing course materials, giving lectures, moderating seminar discussions, supervising students' group projects on prototype development and report writing

INST 408D Special Topic: Designing Patient-Centered Technologies
Undergraduate level; Elective; 3 credits; worked with Prof. Eun Kyoung Choe
- Spring 2020 Graduate Teaching Assistant

The Pennsylvania State University

SRA 468 Visual Analytics
Undergraduate level; Elective; 3 credits; worked with Prof. Guorui Cai
- Spring 2017 Graduate Teaching Assistant

IST 454 Cyber Forensics
Undergraduate level; Elective; 3 credits; worked with Prof. Chao-Hsien Chu
- Fall 2016 Graduate Teaching Assistant
- Fall 2015 Graduate Teaching Assistant

STUDENT MENTORSHIP

Spring 2021 **Abhinav Reddy Vedmala** (Undergraduate Student, UMD Computer Science)
Implementing a multimodal self-tracking app to support speech and touch input.

Spring 2019 **Lily Huang** (Undergraduate Student, UMD iSchool)
Reviewing study protocols and pilot testing for a research study on multimodal exercise tracking.

Summer 2018 **Peiyi Liu** (Master Student, UMD iSchool)
Conducting co-design sessions with registered dietitians and data analysis, co-authored [c4].

SERVICE

Program Committee
CHI Late-Breaking Work Associate Chair (2019)
**Conference Reviewer**
ACM Conference on Designing Interactive System (DIS) 2021
ACM Conference on Interaction Design and Children (IDC) 2020
The Pacific Asia Conference on Information Systems (PACIS) 2020
The Annual Symposium of American Medical Informatics Association (AMIA) 2019

**Journal Reviewer**
ACM Transactions on Computer-Human Interaction (TOCHI) 2021
ACM Computer-Supported Cooperative Work and Social Computing (CSCW) 2022, 2021
ACM Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) 2018-2020
Journal of Medical Internet Research (JMIR) 2021, 2020

**Special Recognition for Outstanding Reviews**
CSCW 2021, CHI 2021

**Volunteer**
ACM Conference on Designing Interactive System (DIS), Student Volunteer (2021)

**Professional and Campus Service**
iSchool Faculty Search Committee (2021), Student Member, University of Maryland

**TALKS**
04/2021 “Designing Multimodal Self-Tracking Technology to Promote Data Capture and Reflection.”
*Social Data Science Center, University of Maryland.*

10/2018 “Personal Data Visualization & Feedback.”
*Guest Lecture, INST 682/CMSC 838X, College of Information Studies, University of Maryland.*

04/2018 “Quantified Cat: Tracking My Cat’s Health & Behavioral Data.”
*Quantified-Self Washington DC Meetup.*

**REFERENCES**
Available upon request.