RESEARCH STATEMENT

As a Human-Computer Interaction (HCI) researcher working at the intersection of Personal Informatics, Health Informatics, and Ubiquitous Computing, I design, build, and evaluate multimodal self-tracking technologies to help individuals effectively collecting their personal health data. My dissertation examines how speech input complements traditional touch input on mobile phones to support low-burden and rich data capture in the context of 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 designing effective self-tracking technologies combining multimodal data input.

EDUCATION

2017–Present  
University of Maryland, College Park, MD  
Ph.D. in Information Studies  
Thesis: Promoting Rich and Low-Burden Self-Tracking Through Multimodal Input  
Advisor: Eun Kyong 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  
Advisor: Eun Kyong Choe

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

HONORS AND AWARDS

2021  
Special Recognition for Outstanding Reviews, CHI 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, San Diego, CA

2014  
Outstanding Award in Literary and Artistic Activities, Southeast University

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

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 training and tracking [c5]. Contributors: Luo Y., Lee B., Choe, EK., 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, EK.

TEACHING EXPERIENCE

University of Maryland, College Park, MD

INST 408D Special Topic: Designing Patient-Centered Technologies

*Undergraduate level; Elective; 3 credits*
- Spring 2021, Instructor, advised 23 undergraduate students on design-based projects involving competitive analysis, designing and building prototypes, writing report, and giving presentations.
- Spring 2020, Graduate Teaching Assistant, worked with Prof. Eun Kyoung Choe.

The Pennsylvania State University, State College, PA

SRA 468 Visual Analytics

*Undergraduate level; Elective; 3 credits*
- Spring 2017, Graduate Teaching Assistant, worked with Prof. Guorui Cai.

IST 454 Cyber Forensics

*Undergraduate level; Elective; 3 credits*
- Fall 2015 & Fall 2016, Graduate Teaching Assistant, worked with Prof. Chao-Hsien Chu.
STUDENT MENTORING

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

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

Summer 2018  **Peiyi Li**, Master Student, UMD iSchool
Collaborated on 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 (Reviewed 23 conference papers)
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 (Reviewed 13 manuscripts)
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) 2020, 2021

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

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

**Eun Kyoung Choe** (advisor), Associate Professor  
College of Information Studies, University of Maryland  
choe@umd.edu

**Bongshin Lee**, Senior Principle Researcher  
Microsoft Research  
bongshin@microsoft.com

**Hernisa Kacorri**, Assistant Professor  
College of Information Studies, University of Maryland  
hernisa@umd.edu

**Beth St Jean**, Associate Professor  
College of Information Studies, University of Maryland  
bstjean@umd.edu