

Michael (Jong Ho) Lee

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Summary

Ph.D. candidate in Human-Computer Interaction (HCI) with proven experience in mixed-methods UX research, product telemetry analysis, and software development. Ph.D. thesis is on the research and development of user-programmable AI-powered communication support technology for people with language disabilities. Skilled in stakeholder engagement and communicating insights to cross-functional teams.

Education

University of Maryland, College Park

Ph.D., Information Studies (Human-Computer Interaction focus)

College Park, MD, USA

Expected 2026

University of California, Irvine

M.S., Computer Science

Irvine, CA, USA

Jun 2020

Chung-Ang University

B.S., Computer Science and Engineering

Seoul, South Korea

Mar 2018

Experience

Microsoft - UX Researcher Intern

Microsoft Azure Data Org

Redmond, WA, USA

May 2025 - Aug 2025

- Led benchmark studies to evaluate user experience quality for key Microsoft Fabric features.
- Engineered data pipelines using KQL and Python, and applied network analysis (NetworkX) to surface UX friction points.
- Created user journey and state transition visualizations in D3.js to surface experience bottlenecks for key stakeholders.
- Leveraged generative AI tools (e.g., Microsoft Copilot) to automate data cleaning and analysis workflows, improving productivity by 2x.
- Presented research insights in cross-functional teams to drive customer-centric product design decisions.

Human-Computer Interaction Lab - PhD Researcher

University of Maryland, College Park

College Park, MD, USA

Aug 2021 - Current

Project: Towards User-Programmable AI-Powered Communication Tools for Adults with Aphasia

- Led co-design workshops with adults with language disabilities to explore how block-based programming can make generative AI language-light and accessible.
- Developed web app prototypes using React and OpenAI API to explore how generative AI can support communication for people with language disabilities.
- Conducted in-depth interviews using the developed web apps to understand how generative AI can be designed for aphasia, published findings in *ACM DIS 2025*.

Project: Supporting Patient-Centered Goal-Setting using Mobile App Journals in Stroke Rehabilitation

- Organized and led a research project examining how multimodal interaction in mobile technology can address accessibility issues for stroke survivors and support goal-setting in rehabilitation.
- Developed a mobile self-tracking app, *GoalTrack*, using cross-platform frameworks. (*React Native with Typescript*).
- Conducted accessible in-person user studies for GoalTrack with 13 people with disabilities.
- Used R to analyze quantitative data and Nvivo to analyze qualitative data to find concrete design recommendations for multimodal interfaces for stroke survivors. Published findings in *ACM IMWUT*, vol. 8, no. 4.

Personal Informatics Everyday (PIE) Lab - Research Assistant

University of California, Irvine

Irvine, CA, USA

Dec 2019 - May 2021

- Conducted in-depth qualitative interviews with 18 participants to understand how app stores can be better designed for self-tracking app users. Published findings in *ACM IMWUT*, vol. 5, no. 4.
- Analyzed 80+ HCI research papers to map out current understandings of self-tracking technology user behavior and trends, resulting in a publication in *ACM IMWUT*, vol. 4, no. 4.

Networked Systems Lab - Undergraduate Research Assistant

Chung-Ang University

Seoul, South Korea

Jan 2017- Aug 2018

- Investigated the feasibility of using acoustic signals to find distances between drones by implementing a time-of-arrival distance measuring algorithm using Android's Java SDK.

Virtual Reality Lab - Undergraduate Research Assistant

Chung-Ang University

Seoul, South Korea

Jan 2015 - Jan 2016

- Built a 3D virtual world compatible with Oculus Rift DK2 and Microsoft Kinect using Unity3D and C# and helped design 4 user interfaces (keyboard control, superman gesture, birdlike gesture, hand gesture) to navigate the 3D virtual world.
- Helped conduct in-person user studies for the 3D virtual world with 31 participants.

Skills

Programming Languages and Tools: Python, C, C++, Java, Javascript, C#, R, Bash / Shell scripting, Git, Github, React, React Native, Android SDK, iOS development, cloud platforms (AWS, Azure).

UX Research: usability testing, interviews, surveys, diary studies, participatory design, telemetry analysis, benchmark studies, ESM, UX health studies.

Data Analysis and Engineering: statistical analysis (hypothesis testing, regression analysis), supervised machine learning (linear regression, logistic regression, Bayes classifiers, decision trees, support vector machines, etc.), deep learning (CNNs, RNNs, LSTM, etc.), data visualizations (D3.js, plotly).

Selected Publications

Jong Ho Lee. 2025. **Do-It-Yourself AAC: Towards Programmable AI-driven Tools to Support Communication for People with Aphasia.** Presented In *ACM SIGACCESS ASSETS 2025 Doctoral Consortium*. (lightly-peer reviewed)

Lei Mao, **Jong Ho Lee**, Yasmeeen Farooqi-Shah, and Stephanie Valencia Valencia. 2025. **Design Probes for AI-Driven AAC: Addressing Complex Communication Needs in Aphasia.** In *Proceedings of the 2025 ACM Designing Interactive Systems Conference (DIS '25)*. <https://doi.org/10.1145/3715336.3735736>

Jong Ho Lee, Sunghoon Ivan Lee, and Eun Kyoung Choe. 2024. **GoalTrack: Supporting Personalized Goal-Setting in Stroke Rehabilitation with Multimodal Activity Journaling.** In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) Vol. 8, No. 4*. <https://doi.org/10.1145/3699723>

Jong Ho Lee, Jessica Schroeder, and Daniel A. Epstein. 2021. Understanding and Supporting Self-Tracking App Selection. In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) Vol. 5, No. 4*. <https://doi.org/10.1145/3494980>

Daniel A. Epstein, Clara Caldeira, Mayara Costa Figueiredo, Xi Lu, Lucas M. Silva, Lucretia Williams, **Jong Ho Lee**, Qingyang Li, Simran Ahuja, Qiuer Chen, Payam Dowlatyari, Craig Hilby, Sazeda Sultana, Elizabeth V. Eikey, and Yunan Chen. 2021. **Mapping and Taking Stock of the Personal Informatics Literature.** In *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT) Vol. 4, No. 4*. <https://doi.org/10.1145/3432231>

Teaching Experience

INST326 Object Oriented Programming in Python

Graduate Teaching Assistant

University of Maryland, College Park

Aug 2023 - Current

ICS 33 Intermediate Programming in Python

Graduate Teaching Assistant

University of California, Irvine

Jan 2020 - Jun 2020

IN4MATX 133 User Interaction Software

Graduate Teaching Assistant

University of California, Irvine

Sep 2019 - Dec 2019

Professional Services

Reviewer, ACM Conference on Human Factors in Computing Systems (CHI): 2026 (1 Special Recognition for Outstanding Reviews), 2025 (1 Special Recognition for Outstanding Reviews), 2023

Reviewer, PACM Human-Computer Interaction, CSCW: 2025

Reviewer, ACM Transactions on Computer-Human Interaction (ToCHI): 2025