Ha Le

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Ph.D. candidate in Computer Science (HCI) at Northeastern University. I build multimodal, human-centered AI/ML systems that adapt to user feedback for detecting human activities, behaviors, and health outcomes on mobile and wearables devices.

SKILLS

Research	Human-Computer Interaction, Wearables and Ubiquitous Computing, Context-Aware Technologies, Experience Sampling, Human Activity Recognition
ML / AI	Machine Learning, Deep Learning, Statistical Modeling, LLM Systems, Multi-Agent Systems
Engineering	Python, PyTorch, TensorFlow, R, Java, Kotlin, Android/WearOS, Flask, MySQL, MongoDB

EDUCATION

2022 – 2028 **Ph.D., Computer Science**, *Northeastern University*
Advisors: Stephen Intille & Varun Mishra

2022 – 2024 **M.Sc., Computer Science**, *Northeastern University*

2018 – 2022 **B.Sc., Mathematics & Computer Science**, *Gustavus Adolphus College*

EXPERIENCE

2022 – present **Graduate Research Assistant** • Northeastern University
Built human-in-the-loop HAR systems combining multimodal wearable sensing with LLM-based sensemaking pipelines. Led publications in top HCI and mobile health venues (e.g., CHI, IMWUT).

2021 – 2022 **Research Assistant** • Gustavus Adolphus College
Analyzed student success patterns in Calculus I using standards-based grading data; identified activity-based student clusters. Led to a peer-reviewed journal publication.

May – Dec 2021 **Data Engineer Intern** • FPT Software
Built ML models for Vietnamese trading market; fine-tuned an OCR pipeline for tabular PDF extraction, improving accuracy by 13% over off-the-shelf baselines.

AWARDS & RECOGNITIONS

2026 *Apple AI/ML Scholar for Human-centered AI*

2026 *Northeastern University Outstanding PhD Students Award*

2022 *Distinguished Contribution, Dept. of Mathematics, Statistics & Computer Science, Gustavus Adolphus College*

UNDER REVIEW

[U1] A. Choube, S. Shrestha, **H. Le**, J. Li, V. D. Swain, and V. Mishra. "DAIMON: Designing AI-Augmented Research Dashboards to Enable Novel Human-AI Collaborative Workflows in Longitudinal Sensing Studies". In: Under Review at IMWUT'26 (2026).

[U2] K. Jin-seo, **H. Le**, A. Choube, V. Mishra, and S. Intille. "Generating Personalized Games with Sensing Data for Longitudinal Data Collection". In: Under Review at UIST'26 (2026).

[U3] R. Lakshminarayanan, **H. Le**, and S. Intille. "Managing Uncertainty Through Play: Gamified Text Messaging for First Encounters With Strangers". In: Under Revision (2026).

[U4] **H. Le**, A. Choube, V. Mishra, and S. Intille. "Feasibility of using a multi-agent LLM system to correct annotations and support low-effort activity labeling". In: Under Revision at IMWUT'26 (2026). [Preprint].

[U5] **H. Le**, A. Choube, V. Mishra, and S. Intille. "Human-in-the-loop Incremental Learning for Human Activity Recognition with Multimodal Wearable Sensors". In: Under Review at IMWUT'26 (2026). [Preprint].

[U6] E. L. Meier, J. Hester, **H. Le**, V. Fletcher, H.-D. Phan, L. Ugent, and S. S. Intille. "Word retrieval in the wild: The feasibility of an audio-based ecological momentary naming protocol completed by adults with and without post-stroke aphasia". In: Under Review (2025).

PUBLICATIONS

[P1] A. Choube, **H. Le**, J. Li, K. Ji, V. Das Swain, and V. Mishra. "GLOSS: Group of LLMs for Open-Ended Sensemaking of Passive Sensing Data for Health and Wellbeing". In: Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies 9.3 (2025), pp. 30. DOI: 10.1145/3749474.

[P2] **H. Le**, A. Choube, D. S. Vedant, V. Mishra, and S. Intille. "A Multi-Agent LLM Network for Suggesting and Correcting Human Activity and Posture Annotations". In: *Companion of the 2025 on ACM International Joint Conference on Pervasive and Ubiquitous Computing*. 2025, pp. 6. DOI: 10.1145/3714394.3756185.

[P3] **H. Le**, V. Potter, A. Choube, R. Lakshminarayanan, V. Mishra, and S. Intille. "A Context-Assisted, Semi-Automated Activity Recall Interface Allowing Uncertainty". In: Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies 9.4 (2025), pp. 33. DOI: 10.1145/3770710.

[P4] **H. Le**, V. Potter, R. Lakshminarayanan, V. Mishra, and S. Intille. "Feasibility and Utility of Multimodal Micro Ecological Momentary Assessment on a Smartwatch". In: CHI Conference on Human Factors in Computing Systems (CHI '25) (2025). DOI: 10.1145/3706598.3714086.

[P5] V. Potter, **H. Le**, U. H. Syeda, S. Intille, and M. A. Borkin. "An Evaluation of Temporal and Categorical Uncertainty on Timelines: A Case Study in Human Activity Recall Visualizations". In: *In 2025 IEEE Visualization and Visual Analytics*. VIS'25. IEEE, 2025.

[P6] R. Lakshminarayanan, A. Uppal, **H. Le**, J. Spilsbury, and S. Intille. "Detecting Sleep Disruptions in Adolescents Using Context-Sensitive Ecological Momentary Assessment: A Feasibility Study". In: *Proceedings of the 18th EAI International Conference on Pervasive Computing Technologies for Healthcare*. New York, NY, USA: ACM, 2024, pp. 1–12. DOI: 10.1007/978-3-031-85572-6_20.

[P7] **H. Le**, R. Lakshminarayanan, J. Li, V. Mishra, and S. Intille. "Collecting Self-Reported Physical Activity and Posture Data Using Audio-Based Ecological Momentary Assessment". In: Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies 8.3 (2024), pp. 1–35. DOI: 10.1145/3678584.

[P8] J. Ford, R. Erickson, **H. Le**, K. Vick, and J. Downey. "Relating Consistent Improvement to Overall Performance in a Calculus I Course That Utilizes Standards-Based Grading". In: PRIMUS 34.8 (2024), pp. 792–804. ISSN: 1051-1970, 1935-4053. DOI: 10.1080/10511970.2024.2361374.

[P9] R. L. Carey, **H. Le**, D. L. Coffman, I. Nahum-Shani, M. Thirumalai, C. Hagen, L. A. Baehr, M. Schmidt-Read, M. S. R. Lamboy, S. A. Kolakowsky-Hayner, R. J. Marino, S. S. Intille, and S. V. Hiremath. "mHealth-based Just-in-Time Adaptive Intervention to Improve the Physical Activity Levels of Individuals with Spinal Cord Injury: Protocol for a Randomized Controlled Trial". In: JMIR Research Protocols 13 (2024), pp. e57699. ISSN: 1929-0748. DOI: 10.2196/57699.

[P10] J. Hester, **H. Le**, S. Intille, and M. Erin. "A Feasibility Study on the Use of Audio-Based Ecological Momentary Assessment with Persons with Aphasia". In: *The 25th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '23)*. 2023, pp. 7. DOI: 10.1145/3597638.3608419.

[P11] **H. Le**, J. Wu, L. Yu, and M. Lynn. *A Study on Channel Popularity in Twitch*. 2021. DOI: 10.48550/arXiv.2111.05939. arXiv: 2111.05939 [cs].

PRESS COVERAGE

2026 *Khoury students bring in record awards haul at 2026 Northeastern convocation*
Khoury News, Northeastern University

2024 *Feasibility and utility of multimodal micro ecological momentary assessment on a smartwatch*
Khoury News, Northeastern University

SERVICE

Reviewing	PACM CHI (2025, 2026), CHI LBW (2025), PACM IMWUT (2025, 2026), IWSC (2025), DIS (2026), MobileHCI (2026), UIST (2026), npj Digital Health (2026)
Assoc. Chair	CHI Poster (2026)
Organizing	Student Volunteer — CHI 2025, Ubicomp 2025; HCC Area Representative, Northeastern Open House 2024–2025; Co-lead, Ubicomp Tutorial on Multi-agent LLM Systems