

Guilin Hu

<https://guilinhhu.github.io/> | 607-379-1605 | guilinhhu@cs.washington.edu

EDUCATION

University of Washington

Seattle, Washington

Ph.D. in Computer Science Engineering

Sep 2024 – Jun 2029

Cornell University, College of Arts and Sciences

Ithaca, New York

B.A. Computer Science.

Aug 2020 - May 2024

RESEARCH INTEREST

I am interested in audio, speech models and conversational AI system by developing intelligent models that allow computers to understand, generate, and interact through sound. I am passionate about extending human auditory perception and enabling us to manipulate our acoustic scenery through on-device deployment of real-time audio processing models.

PRIOR EXPERIENCE

Graduate Student Researcher

Seattle, Washington

University of Washington Mobile Intelligence Lab

Sep 2024 – Jun 2029

Advisor: Prof. Shyam Gollakota

- Develop on-device audio and speech models deployable on mobile intelligent systems to enhance human perception and enable manipulation over our acoustic space. Through this, I aim to enable novel applications on modern hearing devices that can support seamless interactions between human and computer through audio

Undergraduate Student Researcher

Ithaca, New York

Cornell University Smart Computer Interfaces for Future Interactions (SciFi) Lab

Feb 2022 – May 2024

Advisors: Prof. Cheng Zhang and Prof. François Guimbretière

- Conducted research on body and hand pose tracking, identification, and eye-blink detection using active acoustic sensing based on FMCW signals
- Designed and trained deep learning models to analyze data collected from custom-built wearable sensing hardware
- Co-authored and published 3 peer-reviewed papers in IMWUT/ISWC

PUBLICATIONS

- **Proactive Hearing Assistants that Isolate Egocentric Conversations**

Guilin Hu*, Malek Itani*, Tuochao Chen, Shyamnath Gollakota

EMNLP 2025 Main Conference

- **C-Auth: Exploring the Feasibility of Using Egocentric View of Face Contour for User Authentication on Glasses**

Hyunchul Lim, Guilin Hu, Richard Jin, Hao Chen, Ryan Mao, Ruidong Zhang, Cheng Zhang

ISWC 2023

- **PoseSonic: 3D Upper Body Pose Estimation Through Egocentric Acoustic Sensing on Smartglasses**

Saif Mahmud, Ke Li, Guilin Hu, Hao Chen, Richard Jin, Ruidong Zhang, Francois Guimbretiere, Cheng Zhang

IMWUT 2023

- **Ring-a-Pose: A Ring for Continuous Hand Pose Tracking**

Tianhong Yu, Guilin Hu, Ruidong Zhang, Hyunchul Lim, Saif Mahmud, Chi-Jung Lee, Ke Li, Devansh Agarwal, Shuyang Nie, Jinseok Oh, Francois Guimbretiere, Cheng Zhang

IMWUT 2024

MENTORING

- Aseem Gauri, ECE Undergraduate Student, University of Washington

June 2025 – Present

AWARDS & HONORS

Honorable Mention of the 2024 Computing Research Association's (CRA) Outstanding Undergraduate Researcher Award (URA) *Dec 2023*

Award conferred upon top undergraduate students in North American colleges and universities who show outstanding potential in an area of computing research

Cornell University Summer Experience Grant (USD 5,370 & USD 4,790) *June 2023 & May 2022*

Award conferred upon top Cornell University students to offer financial support for summer research

Cornell University Dean's List *Fall 2020 & Fall 2021 & Spring 2022 & Fall 2022 & Spring 2023*

Honor presented each semester for students achieving exemplary academic records

SKILLS & INTERESTS

- **Skills:** Python • Deep Learning • LLM • Pytorch • Numpy • SQL • Java • Pandas

- **Interests:** Plane Spotting • Landscape Photography • Mountain Biking • Table Tennis

LANGUAGES

- Chinese (Native)

- English (Fluent)

- French (Fluent)