VASCO XU

vascoxu@uchicago.edu / http://www.vascoxu.com

EDUCATION

University of Chicago 2021 - 2027 (Expected) Ph.D (& M.S) in Computer Science Advisors: Dr. Hank Hoffmann **Northwestern University** 2024 - Now Visiting Researcher Advisor: Dr. Karan Ahuja **University of Pittsburgh** 2016 - 2020 B.Phil (& B.S) in Computer Science Advisors: Dr. Sherif Khattab & Dr. Daniel Mossé PROFESSIONAL EXPERIENCE

Google Apr. 2024 - Sept. 2024 Student Researcher Seattle, WA

• Prototype tools to empower people with low vision in XR.

- Surface-bounded interactions for XR.
- Evaluation of text entry for XR.
- Advised by: Mar Gonzalez-Franco and Harish Kulkarni.

Immunetrics Aug. 2019 - Dec. 2019 Software Support Engineer Pittsburgh, PA

• Developed a web application for a biological model building platform.

PUBLICATIONS

- [7] Gambler: Adaptive Sampling Under Energy Budgets Vasco Xu, Tejas Kannan, and Henry Hoffmann EWSN 2025 - International Conference on Embedded Wireless Systems and Networks
- [6] WatchHAR: Real-time On-device Human Activity Recognition System for Smartwatches Taeyoung Yeon, Vasco Xu, Henry Hoffmann, and Karan Ahuja ICMI 2025 – ACM International Conference on Multimodal Interaction
- [5] Multi-dimensional Engagement for Richer Hyperlocal Citizen Science Data Abhishek Viswanathan, Vasco Xu, Amy Babay, Rosta Farzan, and Aaron Birdy C&T 2025 - International Conference on Communities & Technologies
- [4] MobilePoser: Real-Time Full-Body Pose Estimation and 3D Human Translation from IMUs in Mobile Consumer Devices

Vasco Xu, Chenfeng Gao, Henry Hoffmann, and Karan Ahuja UIST 2024 - ACM Symposium on User Interface Software and Technology

[3] MotionTrace: IMU-based Field of View Prediction for Smartphone AR Interactions Rahul Islam, Vasco Xu, and Karan Ahuja

- BSN 2024 IEEE-EMBS International Conference on Body Sensor Networks
- [2] Xs: Interactive Scissor Mechanisms as Portable and Customizable Shape-Changing Interfaces Vasco Xu and Ken Nakagaki

TEI 2023 - ACM International Conference on Tangible, Embedded and Embodied Interaction

[1] LUSH: Lightweight Framework For User-Level Scheduling in Heterogeneous Multicores Vasco Xu, Liam White McShane, and Daniel Mossé MCSoC 2021 – IEEE International Symposium on Embedded Multicore/Many-core Systems-on-Chip

PRESENTATIONS AND EXHIBITIONS

- 5. **[Google AR]** "Surface Plane Interactions", 2025
- 4. [South by Southwest (SXSW)] "Xs Sculpture", 2024
- 3. [Chicago South Side Science Festival] "Xs Sculpture", 2023
- 2. [Ars Electronica] "Xs Sculpture", 2023
- 1. [Symposium on the Science of Security (HotSoS)] "MAZE: A Secure Cloud Storage Service Using Moving Target Defense and Secure Shell Protocol (SSH) Tunneling", 2021

SELECTED HONORS AND AWARDS

McCormick Fellowship, University of Chicago	2021
Honorable Mention for Outstanding Undergraduate Researcher, Computing Research Association (CRA)	2021
Bachelor of Philosophy Degree (highest undergraduate distinction), University of Pittsburgh	2021
Chancellor's Undergraduate Research Fellowship, University of Pittsburgh	2020
Seed Scholar Grant, University of Pittsburgh	2020
Dietrich School Scholarship, University of Pittsburgh	2017

PAPER REVIEWING

ACM CHI LBW	2025
ACM IMWUT	2024, 2025
ACM TEI	2025
ACM CHI	2025, 2026
ACM UIST	2024, 2025

STUDENT MENTORING

Brian Chen, Undergraduate, Northwestern University	2024-Present
Bishnu Dev, Undergraduate, NYU Abu Dhabi	2023-Present

TEACHING EXPERIENCE

Guest Lecturer, AI/ML Bootcamp Google Seattle	2024
Guest Lecturer, Advanced Topics in Ubiquitous Computing Northwestern University	2024

• Undergraduate Teaching Assistant, Introduction to Programming with Java 2019 University of Pittsburgh

SELECTED PRESS COVERAGE

Northwestern Engineering New App Performs Real-Time, Full-Body Motion Capture with a Mobile Device **Hackster.io** Tracking Movement on the Move

2024 2024