

# Matthew Jeung

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## EDUCATION

### University of Chicago

*BS in Computer Science, Specialization in Machine Learning*

- **GPA:** 3.86/4

Chicago, IL

*Expected, 2026*

## RESEARCH EXPERIENCE

### University of Chicago - Actuated Experience Lab

*Undergraduate Researcher (Advised by Prof. Ken Nakagaki)*

- Introduced a new hand and speech-based approach for generative control of swarm user interfaces.
- Designed a novel modular haptic device and system, in industry collaboration with Sony Research.
- First-author and co-first-author to two full HCI research papers.

9/2023 – Present

*Chicago, IL*

### Toyota Technological Institute at Chicago

*Intern at Robot Intelligence through Perception Lab (Advised by Prof. Matthew Walter)*

- Leading a multi-module flywheel-based locomotion project with deep reinforcement learning.
- Worked on a novel video autoencoder architecture for a robot learning paper, under a PhD.
- Extensive experience with PyTorch, parallelized GPU training, data processing, and visualization.
- Developed and taught computer vision curriculum for a HS robotic arm course.

6/2025 - Present

*Chicago, IL*

## PAPERS

- [1] Shape n' Swarm: Hands-on, Shape-aware Generative Authoring with Swarm UI and LLMs.  
**Matthew Jeung**, Anup Sathya, Michael Qian, Steven Arellano, Luke Jimenez, Ken Nakagaki.  
*In Proc. UIST 2025. Acceptance Rate: 22.2%. **Best Demo (Jury's Choice)**.*
- [2] TorquePods: Multi-Module Coordinated Flywheel-based Haptic Toolkit for Advanced Haptic Design.  
Yifan Zou\*, **Matthew Jeung\***, Zhenglang Wang, Willa Yang, Ken Nakagaki.  
*Under Review for CHI 2026.*

## AWARDS

UIST 2025 Best Demo Award (Jury's Choice)	2025
Quad Undergraduate Research Award (2x)	2024-25
Jeff Metcalf Fellowship	2023
Humanities UX Scholar	2022

## COURSEWORK

Theory of Algorithms; Math Foundations for Machine Learning; Engineering Interactive Devices; Mobile Computing; Introduction to Designing Interaction.

**Graduate/PhD Level:** Introduction to Machine Learning; Robot Planning, Learning, and Estimation

## VOLUNTEERING

### UChicago Asian American Intersvarsity

*Service Coordinator*

- Started and organized regular tutoring, care-packaging nights with local organizations.
- Developed partnerships with local service providers in Chinatown and South Chicago.

September 2024-Present

*Chicago, IL*

## EXTRACURRICULARS

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### **UChicago Robotics Team**

October 2024-Present

*Combat Robotics Team*

*Chicago, IL*

- Won MakeHarvard 2025 Most Sustainable Project with glove integrated with grocery sustainability feedback
- Designed 1-lb combat robot from scratch, developing Fusion 360, electronics, and prototyping skills

### **Phoenix Sustainability Initiative**

September 2023 – May 2024

*Green Data Team*

*Chicago, IL*

- Performed Python data analysis and visualization on Chicago environmental justice and health conditions.

## TECHNICAL SKILLS

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**Programming:** Python, Java, Swift, C/C++, JavaScript, PyTorch, React, Processing

**Electronics and Hardware:** Microcontrollers, Fusion 360, Rhino, Soldering