Yunyi Zhu - CV

Ph.D. Candidate
MIT Electrical Engineering & Computer Science Department
MIT Computer Science and Artificial Intelligence Lab
32 Vassar Street, Cambridge, MA 02139 USA, Room 32-211
yunyizhu@mit.edu, yunyi-zhu.github.io

Education

Massachusetts Institute of Technology, Cambridge, MA   2021 - now
Ph.D. in Computer Science
MIT EECS Department
Advisor: Stefanie Mueller

Massachusetts Institute of Technology, Cambridge, MA   2020 - 2021
MEng. in Computer Science
MIT EECS Department
Advisor: Stefanie Mueller

Massachusetts Institute of Technology, Cambridge, MA   2016 - 2020
S.B. in Computer Science and Engineering
MIT EECS Department
Minor in Design
Advisor: Stefanie Mueller

Full Paper Publications

[8]   **Yunyi Zhu**, Qingyuan Li, Katherine Arianna Yan, Emily Guan, Alexandru Luchianov, Eden Hen, Stefanie Mueller. ChromoLCD: LCD-based Compact Reprogrammer for On-the-fly High-Resolution Images on Photochromic Surfaces. In *Proceedings of ACM TEI 2026. (to appear)*

[7]   Cedric Honnet, Wedyan Babatain, Yiyue Luo, Ozgun Kilic Afsar, Chloe Bensahel, Sarah Nicita, **Yunyi Zhu**, Andreea Danielescu, Neil Gershenfeld, Joseph A. Paradiso. FiberCircuits: A Miniaturization Framework To Manufacture Fibers That Embed Integrated Circuits. In *Proceedings of ACM UIST 2025.*

[6]   Faraz Faruqi, Maxine Perroni-Scharf, Jaskaran Singh Walia**, Yunyi Zhu**, Shuyue Feng, Donald Degraen, and Stefanie Mueller. TactStyle: Generating Tactile Textures with Generative AI for Digital Fabrication. In *Proceedings of ACM CHI 2025.*

[5]   **Yunyi Zhu**, Cedric Honnet, Yixiao Kang, Junyi Zhu, Angelina J. Zheng, Kyle Heinz, Grace Tang, Luca Musk, Michael Wessely and Stefanie Mueller. PortaChrome: A

Portable Contact Light Source for Integrated Re-Programmable Multi-Color Textures. In *Proceedings of ACM UIST 2024*.

[4] Jiani Zeng*, Honghao Deng*, **Yunyi Zhu***, Michael Wessely, Axel Kilian and Stefanie Mueller. Lenticular Objects: 3D Printed Objects with Lenticular Lens Surfaces that Can Change their Appearance Depending on the Viewpoint. In *Proceedings of ACM UIST 2021*. [* equal contribution]

[3] Junyi Zhu, **Yunyi Zhu**, Jiaming Cui, Leon Cheng, Jackson Snowden, Mark Chounlakone, Michael Wessely and Stefanie Mueller. MorphSensor: A 3D Electronic Design Tool for Reforming Sensor Modules. In *Proceedings of ACM UIST 2020*.

[2] Junyi Zhu, Lotta-Gili Blumberg, **Yunyi Zhu**, Martin Nisser, Ethan Levi Carlson, Xin Wen, Kevin Shum, Jessica Ayeley Quaye, and Stefanie Mueller. CurveBoards: Integrating Breadboards into Physical Objects to Prototype Function in the Context of Form. In *Proceedings of ACM CHI 2020*.

[1] Mustafa Doga Dogan, Ahmad Taka, Michael Lu, **Yunyi Zhu**, Akshat Kumar, Aakar Gupta, Stefanie Mueller. InfraredTags: Invisible AR Markers & Barcodes Using Low-Cost, Infrared-Based 3D Printing & Imaging Tools. In *Proceedings of ACM CHI 2022*.

Extended Abstracts, Posters & Demonstrations

[7] **Yunyi Zhu**, Cedric Honnet, Yixiao Kang, Junyi Zhu, Angelina J. Zheng, Kyle Heinz, Grace Tang, Luca Musk, Michael Wessely, Stefanie Mueller. Demonstration of ChromoCloth: Re-Programmable Multi-Color Textures through Flexible and Portable Light Source. In *Adjunct Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23 Adjunct)*.

[6] Cedric Honnet, **Yunyi Zhu**, Martin Nisser, Chao Liu, Byungchul Kim, Jae Hun Seol, Jongho Lee, Daniela Rus, Stefanie Mueller. Laser-Etching Flexible Sensors for Robotic Touch Recognition. *Poster, IEEE ICRA 2023*.

[5] Jiani Zeng*, Honghao Deng*, **Yunyi Zhu***, Michael Wessely, Axel Kilian, and Stefanie Mueller. Demonstration of Lenticular Objects: 3D Printed Objects with Lenticular Lens Surfaces That Can Change their Appearance Depending on the Viewpoint. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22)*.

[4] Cedric Honnet, **Yunyi Zhu**, Junyi Zhu, Michael Wessely and Stefanie Mueller. WearaFab: Digital Fabrication for Wearables Toolkits. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22).)*.

[3] Mustafa Doga Dogan, Veerapatr Yotamornsunthorn, Ahmad Taka, **Yunyi Zhu**, Aakar Gupta, and Stefanie Mueller. Demonstrating InfraredTags: Decoding Invisible 3D

Printed Tags with Convolutional Neural Networks. In *Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems (CHI EA '22)*.

[2]   Junyi Zhu, **Yunyi Zhu,** Jiaming Cui, Leon Cheng, Jackson Snowden, Mark Chounlakone, Michael Wessely and Stefanie Mueller. Demonstration of MorphSensor: A 3D Electronic Design Tool for Reforming Sensor Modules. In *Adjunct Publication of the 33rd Annual ACM Symposium on User Interface Software and Technology (UIST '20 Adjunct)*.

[1]   Junyi Zhu, Lotta-Gili Blumberg, **Yunyi Zhu**, Martin Nisser, Ethan Levi Carlson, Xin Wen, Kevin Shum, Jessica Ayeley Quaye, and Stefanie Mueller. CurveBoards Demo: Integrating Breadboards into Physical Objects to Prototype Function in the Context of Form. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20)*.

Academic Service

Associate Chair

ACM DIS	2026
ACM TEI Late Breaking Work	2025

Reviewer

ACM CHI	2024 - 2026
ACM UIST	2022 - 2025
ACM SCF	2022 - 2023
ACM DIS	2023
ACM C&C	2022
ACM TEI	2021, 2025
ACM SUI	2023

Student Volunteer

ACM CHI	2024, 2022

Research Internships

Adobe Research, Adobe	2025

Research Intern
Advisor: Chang Xiao, Eunyee Koh

Kawahara Lab, The University of Tokyo	2022

Visiting Graduate Student
Advisor: Koya Narumi

Software Design Group, MIT CSAIL   2019 - 2020
Undergraduate Research Assistant
Advisor: Daniel Jackson

MIT Game Lab, MIT Media Lab   2017
Undergraduate Research Assistant
Advisor: Philip Tan

Work Experience

Mayflower Venues, Charlestown, MA   2018
Web Development Intern, supervisor: Wesley Ripley

Lark Health, Mountain View, CA   2018
Software Engineering Intern, supervisor: Jeff Zira

Awards

Ben Gold Teaching Fellowship, MIT	2024
Jacobs Presidential Fellowship, MIT EECS	2021
EECS Licklider Best Undergraduate Research Award, MIT EECS	2021
Best SuperUROP Award, MIT EECS	2019
Leiserchess Performance Engineering Award, MIT 6.172	2018

Mentoring

Research Project Students

[13]	Jeremy Mrzyglocki	2026	
[12]	Angelina Kwiatkowski	2025-2026	
[11]	Dingning Cao	2025-2026	
[10]	Emily Guan	2024	
[9]	Alex C Luchianov	2024	*[MIT EECS Best UROP Award]*
[8]	Eden Hen	2024	
[7]	Katherine Yan	2024	
[6]	Andy Li	2023-2024	*[MIT EECS Best UROP Award]*
[5]	Yixiao Kang	2022	
[4]	Angelina Zheng	2022	
[3]	Kyle Heinz	2022	
[2]	Luca Musk	2022	
[1]	Grace Tang	2021-2022	

Teaching

Instructor / Co-Instructor

Actuated Experiences, MIT Global Teaching Lab   Winter 2025

Teaching Assistant

[4]	6.C35	**Interactive Data Visualization & Society**, MIT	Spring 2023
[3]	6.033	**Computer Systems Engineering**, MIT	Spring 2021
[2]	6.046	**Design and Analysis of Algorithms**, MIT	Fall 2020
[1]	6.033	**Computer Systems Engineering**, MIT	Spring 2020

Lectures

6.810   **Engineering Interactive Technologies,** Shape-Changing Structures, MIT Fall 2021