

# Yunyi Zhu - CV

Ph.D. Candidate

MIT Electrical Engineering & Computer Science Department

MIT Computer Science and Artificial Intelligence Lab

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## 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

- [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 Quayle, 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

### Reviewer

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

### Student Volunteer

|         |            |
|---------|------------|
| ACM CHI | 2024, 2022 |
|---------|------------|

## Research Internships

**Kawahara Lab**, The University of Tokyo  
Visiting Graduate Student  
Advisor: Koya Narumi  
2022

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

**HCI Engineering Group**, MIT CSAIL  
Undergraduate Research Assistant  
Advisor: Stefanie Mueller  
2018 - 2019

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

## Work Experience

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

**Lark Health**, Mountain View, CA  
2018

Software Engineering Intern, supervisor: Jeff Zira

## Awards

|  |      |
|--|------|
| 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

|      |                  |           |
|------|------------------|-----------|
| [10] | Emily Guan       | 2024      |
| [9]  | Alex C Luchianov | 2024      |
| [8]  | Eden Hen         | 2024      |
| [7]  | Katherine Yan    | 2024      |
| [6]  | Andy Li          | 2023      |
| [5]  | Yixiao Kang      | 2022      |
| [4]  | Angelina Zheng   | 2022      |
| [3]  | Kyle Heinz       | 2022      |
| [2]  | Luca Musk        | 2022      |
| [1]  | Grace Tang       | 2021-2022 |

## Teaching Assistantship

|              |  |            |
|--------------|--|------------|
| <b>6.C35</b> | <b>Interactive Data Visualization &amp; Society, MIT</b> | 2023       |
| <b>6.033</b> | <b>Computer Systems Engineering, MIT</b>                 | 2020, 2021 |
| <b>6.046</b> | <b>Design and Analysis of Algorithms, MIT</b>            | 2020       |