

Research Interests

Human-computer interaction; robotic ubiquitous interaction; AI augmented reality.

Education

University of California, Los Angeles

Ph.D. in Human-Computer Interaction

• **Advisor:** Xiang ‘Anthony’ Chen

Los Angeles, USA

Sep 2018 - Current

University of California, Los Angeles

M.S. in Mechanical Engineering

Los Angeles, USA

Sep 2017 - Sep 2018

Shanghai Jiao Tong University

B.S. in Naval Architecture and Marine Engineering

Shanghai, China

Sep 2013 - Jun 2017

Publication

IN PREPARATION

- [11] **Jiahao “Nick” Li**, Xingyu “Bruce” Liu, Stephanie Santosa, Michelle Li, Tovi Grossman. [On Multimodal interaction in AR]. *In preparation*
- [10] Xingyu “Bruce” Liu, **Jiahao “Nick” Li**, Ruofei Du, Yang Zhang, Xiang ‘Anthony’ Chen. [On Human Activities modeling]. *In preparation*.
- [9] **Jiahao “Nick” Li**, Toby Chong, Zhongyi Zhou, Hironori Yoshida, Koji Yatani, Xiang ‘Anthony’ Chen, Takeo Igarashi. RoboCap: Automatic Capturing and Annotating Images of Everyday Objects via A Robotic Arm for 6D Pose and State Estimation. *In preparation*
- [8] **Jiahao “Nick” Li**, Ruolin Wang, Li-Yi Wei, Rubaiat Habib Kazi, Stephen DiVerdi, Xiang ‘Anthony’ Chen. RealityPlay: Authoring Interactive and Embedded Graphics Driven by Everyday Objects with User-defined Mappings. *In preparation*.

FULL PAPER

- [7] Xiaoying Yang, Jacob Sayono, Jess Xu, **Jiahao “Nick” Li**, Josiah Hester, Yang Zhang. MiniKers: Interaction-Powered Smart Environment Automation. *In Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (IMWUT), Volume 6 Issue 3, September. 2022.*
- [6] **Jiahao “Nick” Li**, Alexis Samoylov, Jeeun Kim, Xiang ‘Anthony’ Chen. Roman: Making Everyday Objects Robotically Manipulable with 3D-printable Add-on Mechanisms. *Proc. ACM CHI 2022.*
- [5] Abul Al Arabi, **Jiahao “Nick” Li**, Xiang ‘Anthony’ Chen, Jeeun Kim. Mobiot: Augmenting everyday objects into moving IoT devices using 3D printed attachments generated by demonstration. *Proc. ACM CHI 2022.*
- [4] **Jiahao “Nick” Li**, Meilin, Cui, Jeeun Kim, Xiang ‘Anthony’ Chen. Romeo: A Design Tool for Embedding Transformable Parts in 3D Models to Robotically Augment Default Functionality. *Proc. ACM UIST 2020.*
- [3] **Jiahao “Nick” Li**, Jeeun Kim, Xiang ‘Anthony’ Chen. Robiot: A Design Tool for Actuating Everyday Objects with Automatically Generated 3D Printable Mechanisms. *Proc. ACM UIST 2019.*

PREPRINTS

- [2] Zhaoliang Zheng, **Jiahao “Nick” Li**, Parth Agrawal, Ethan Uetrecht, Zhao Lei, Joseph Prince Mathew, Dinesh Kumar Karri, Ankur Mehta. User Design Parameters Based Design and Evaluation System for Indoor Airships. *Arxiv.*
- [1] Erva Ulu, Nurcan Gecer Ulu, **Jiahao “Nick” Li** and Walter Hsiao. Curvy: An Interactive Design Tool for Varying Density Support Structures. *Arxiv.*

POSTER & EXTENDED ABSTRACT & WORKSHOP

- [W3] **Jiahao “Nick” Li**, Meilin, Cui, Jeeun Kim, Xiang ‘Anthony’ Chen. Romeo: A Design Tool for Embedding Transformable Parts in 3D Models to Robotically Augment Default Functionality. *Demo at ACM UIST 2020 and Poster at ACM UIST 2022.*
- [W2] **Jiahao “Nick” Li**, Jeeun Kim, Xiang ‘Anthony’ Chen. Robiot: A Design Tool for Actuating Everyday Objects with Automatically Generated 3D Printable Mechanisms. *Demo in ACM UIST 2019.*
- [W1] Ruolin Wang, Yuqi Tang, Hsuan Wei Fan, **Jiahao “Nick” Li**, Xiang ‘Anthony’ Chen. Auxiscope: Improving Awareness Surroundings for People with Tunnel Vision. *UIST Student Innovation Competition, October 2019.*

Professional Experience

Meta Reality Labs

Research Intern

Toronto, Canada

Dec 2022 - Apr 2023 (expected)

- **Research Mentor:** Tovi Grossman
- Working on topics related to multimodal interaction in Augmented Reality.

Igarashi Lab at University of Tokyo

Visiting Ph.D. Student

Tokyo, Japan

Jun 2022 - Oct 2022

- **Faculty Supervisor:** Takeo Igarashi, **Collaborators:** Koji Yatani, Hironori Yoshida
- Worked on a project utilizing robotic arm for the data collection for object 6D pose estimation tasks.

Adobe Research

Research Intern

Los Angeles (Remote), USA

Jun 2021 - Sep 2021

- **Research Mentors:** Li-Yi Wei, Rubaiat Habib Kazi, Stephen DiVerdi
- Worked on developing an interactive authoring tool for virtual-real object interaction.

PARC, A Xerox Company

Research Intern

Palo Alto, USA

Jun 2019 - Sep 2019

- **Research Mentors:** Erva Ulu, Nurcan Ulu
- Worked on developing a new type of supporting materials structure.

Press Coverage

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|---------------|--|------|
| Robiot | New Scientist , Turn any object into a robot using this program and a 3D printer. | 2019 |
| | Hackster News , Robiot Is a Design Tool That Generates Mechanisms to Motorize Everyday Objects. | 2019 |
| | Fabbaloo , Robiot Can Automatically Design Handy Household Machines. | 2019 |

Service

- | | |
|--------------------------|---------------------------------------|
| Program Committee | ACM CHI LBW 2020, 2021 |
| Reviewer | ACM UIST 2020-2022; ACM CHI 2020-2023 |