Jiahao "Nick" **LI**

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Research Interests

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

Education

University of California, Los Angeles — *Los Angeles, USA*
Ph.D. in Human-Computer Interaction — *Sep 2018 - Current*
- **Advisor:** Xiang 'Anthony' Chen

University of California, Los Angeles — *Los Angeles, USA*
M.S. in Mechanical Engineering — *Sep 2017 - Sep 2018*

Shanghai Jiao Tong University — *Shanghai, China*
B.S. in Naval Architecture and Marine Engineering — *Sep 2013 - Jun 2017*

Publication

IN PREPARATION

[11] **Jiahao "Nick" Li**, Michelle Li, Stephanie Santosa, Yan Xu, Tovi Grossman. [On Understanding and Predicting Human Intention using LLMs]. *In submission to UIST 2023*

[10] Xingyu "Bruce" Liu, **Jiahao "Nick" Li**, Xiang 'Anthony' Chen, Ruofei Du. Human I/O: Identifying Situational Impairments via Modeling of Human Input/Output Channels. *In submission to UIST 2023*.

[9] **Jiahao "Nick" Li**, Toby Chong, Zhongyi Zhou, Hironori Yoshida, Koji Yatani, Xiang 'Anthony' Chen, Takeo Igarashi. RoboCap: A Robotic Pipeline for Collecting Dataset of State-changing Objects Pose Estimation. *In Submssion to UIST 2023*

[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. *Submitted to SIGGRAPH 2023 Conference Track*.

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, Jeeeun 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, Jeeeun 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, Jeeeun 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**, Jeeeun 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, Jeeeun 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**, Jeeeun 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 *Toronto, Canada*

Research Intern *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 *Tokyo, Japan*

Visiting Ph.D. Student *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 *Los Angeles (Remote), USA*

Research Intern *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 *Palo Alto, USA*

Research Intern *Jun 2019 - Sep 2019*

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

Press Coverage

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