

# Chiao Fang

PHD STUDENT · HCI GROUP AT HASSO-PLATTNER-INSTITUT

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## Research Statement

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My research interest is in Human-Computer Interaction, focusing on personal fabrication. I worked on enabling increased complexity with laser cutters to build complex 3-dimensional objects with ease. I am also interested in applying personal fabrication techniques in tangible interaction and sensing, or using augmented/virtual reality to support fabrication.

## Education

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### Hasso Plattner Institute (HPI)

PHD STUDENT

Advised by Prof. Dr. Patrick Baudisch

Oct. 2022 - Present

Potsdam, Germany

### National Taiwan University (NTU)

BACHELOR OF SCIENCE IN COMPUTER SCIENCE & INFORMATION ENGINEERING WITH A MINOR IN MECHANICAL ENGINEERING

Sep. 2017 - Jan. 2022

Taipei, Taiwan

- GPA: 4.03/4.30

## Publications

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- [1] Chiao Fang<sup>†</sup>, Vivian Hsinyueh Chan<sup>†</sup>, and Lung-Pan Cheng. 2022. **Flaticulation: Laser Cutting Joints with Articulated Angles**. In *Proceedings of the 35th Annual ACM Symposium on User Interface Software and Technology (UIST '22)*. [\[link\]](#)
- [2] Bo-Cheng Ke, Min-Han Li, Yu Chen, Chia-Yu Cheng, Chiao-Ju Chang, Yun-Fang Li, Shun-Yu Wang, Chiao Fang, and Mike Y. Chen. 2023. **TurnAhead: Designing 3-DoF Rotational Haptic Cues to Improve First-person Viewing (FPV) Experiences**. In *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23)*. [\[link\]](#)

<sup>†</sup> indicates equal contribution

## Research Experience

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### Human Computer Interaction Lab, HPI

PHD STUDENT, SUPERVISED BY PROF. DR. PATRICK BAUDISCH

- Researching on digital fabrication and laser cut assembly instructions

Oct. 2022 - Present

Potsdam, Germany

### Computational Physicality Lab, NTU

RESEARCH ASSISTANT, SUPERVISED BY PROF. LUNG-PAN CHENG

- Research focuses on personal fabrication and tangible interface

Feb. 2022 - Jul. 2022

Taipei, Taiwan

### Computational Physicality Lab, NTU

UNDERGRADUATE RESEARCHER, SUPERVISED BY PROF. LUNG-PAN CHENG

- Proposed special laser-cut joint to facilitate the assembly of 3D objects
- Constructed a large, interactive mid-air surrounding shape display

Sep. 2020 - Jan. 2022

Taipei, Taiwan

### Human Computer Interaction Lab, NTU

UNDERGRADUATE RESEARCHER, SUPERVISED BY PROF. MIKE Y. CHEN

- Researched on haptics using compressed air in VR to alleviate cybersickness and improve viewing experience for immersive videos
- Designed haptic feedback for impacts, analyzed data from user studies, and provided visualizations of the data

Feb. 2020 - Sep. 2020

Taipei, Taiwan

## Teaching Experience

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