

# YUECHENG PENG

✉ [ychpeng@uw.edu](mailto:ychpeng@uw.edu)   [yuechengpeng.github.io/yuechengDesignGarden/](https://github.com/yuechengpeng/yuechengDesignGarden/)

## Education

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### University of Washington

*Master of Science in Technology Innovation*

23.9 - 24.12

### Zhejiang University

*Bachelor of Engineering, Industrial Design. GPA [3.98/4.0(91.93/100)] Rank [1/45]*

19.9 - 23.6

- **Relevant Coursework:** Information Product Design, Information & Interaction Design Technology, Ergonomics
- **Awards:** Four times Excellent Academic Model, two times Second Class Scholarship, one time Third Class Scholarship

## Research Experience

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### Fabrication of Smart Textiles

Zhejiang University, Research Intern

*Advisor: Guanyun Wang, International Design Institute of Zhejiang University*

22.9 - 23.9

- Conducted comprehensive material experiment and research.
- Physical prototyping using our proposed fabrication method.
- Write the paper independently (submitted to CHI24 as the first author).

### Designing Knowledge Graph Tool for Sustainability Education

Zhejiang University, Research Intern

*Advisor: Xuanhui Liu, International Design Institute of Zhejiang University*

21.10 - 22.4

- Designed and developed a online knowledge graph tool ready to be used in sustainable education settings.
- Collected and organized related works of this research.
- Paper submitted to the journal of cleaner production.

### HoloLens2 Expander Interaction

Zhejiang University, Research Intern

*Advisor: Liuqing Chen, International Design Institute of Zhejiang University*

21.8 - 21.12

- Lead the design team, came up with design guidelines and standardized workflow, which increased the inter-team work efficiency by 60%.
- Optimized user interaction experience with the HoloLens2 interface and improved the comfort level as well as immersiveness.
- Our design team was successfully selected to cooperate with Zhejiang Provincial Energy Group Company Ltd. in the bidding.

### Music Emotion Visualization

Zhejiang University, Research Assistant

*Advisor: Kejun Zhang, International Design Institute of Zhejiang University*

20.6 - 21.6

- Responsible for literature research and functional design.
- Designed and conducted the experiment to collect people's valence-arousal sentiment value on music as well as different graphic and color expressions, which constitute the supporting database of our mobile App.
- This project was selected as a provincial research project (top 6%) and we developed a App demo.

## Personal Projects

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### MagPaper: Rapid Prototyping of Haptic Interface Based on Paper - [LINK](#)

- Proposed a rapid prototyping method for creating accessible haptic interface.
- Experimented with magnetic elastomer materials.

### 48°C SUGAR: Material Redesign of Traditional Sugar Figure Blowing Art - [LINK](#)

- Design of a new sugar material that allows hands-on interaction.
- Conducted a user study to prove potentials of the proposed new material.

### MOISTVALVE: A Moisture Sensory Soft Valve - [LINK](#)

- Prototyped a novel physical intelligent soft valve that can sense humidity without electricity.
- Experimented with shape-changing responsive materials.

## Skills & Interests

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**Strength** Physical prototyping, Data analytics and visualization, Interdisciplinary knowledge & thinking,

**Technical:** JavaScript, Python, C, C#, Rhino, Figma, Arduino, Raspberry Pi, All kinds of rapid fabrication machines

**Languages** Chinese (native), English (Fluent: TOEFL 109, GRE 325)

**Interest** Personal Fabrication Research in HCI