

# CHAO ZHANG

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## RESEARCH INTERESTS

**Human-Computer Interaction; Human-AI Interaction; Human-AI Collaboration; Co-Creativity; Creativity Support Tool; Computational Design; Design Tool; Child-Computer Interaction; Educational Technology; Learning Tools; Digital Sketch; Cognition;**

## EDUCATION

**M.E. in Industrial Design • Zhejiang University, China** Sept. 2020 - Mar. 2023 (Expected)

GPA: 3.97 / 4.00, top 3% (1/60), Advisor: Cheng Yao

Awarded by National Scholarship, Ministry of Education, China

**B.E. in Electrical Engineering • Jiangnan University, China** Sept. 2016 - Jul. 2020

GPA: 3.82 / 4.00, top 5% (3/80), Advisor: Ze Tang

Awarded by National Scholarship, Ministry of Education, China

**Minor in Digital Media Technology • Jiangnan University, China** Sept. 2017 - Jul. 2020

GPA: 3.40 / 4.00, top 1 (1/30)

**Computer Science Summer Program • National University of Singapore, Singapore** Jul. 2018 - Aug. 2020

## PUBLICATIONS

### Peer-Review Conference Papers & Posters

**Chao Zhang**, Cheng Yao, Jiayi Wu, Weijia Lin, Lijuan Liu, Ge Yan, and Fangtian Ying. May. 2022  
*StoryDrawer: A Child-AI Collaborative Drawing System to Support Children's Creative Visual Storytelling* • CHI 2022 Paper • <https://doi.org/10.1145/3491102.3501914> (C.6.)

Ge Yan, **Chao Zhang**, Jiadi Wang, Zheng Xu, Jianhui Liu, Jintao Nie, Fangtian Ying, and Cheng Yao. May. 2022  
*CamFi: An AI-driven and Camera-based System for Assisting Users in Finding Lost Objects in Multi-Person Scenarios* • CHI 2022 Poster • <https://doi.org/10.1145/3491101.3519780> (C.5.)

Ge Yan, Cheng Yao, **Chao Zhang**, Jiadi Wang, Yuqi Hu, and Fangtian Ying. Mar. 2022  
*MusicCollage: A Music Composition Tool for Children Based on Synesthesia and a Genetic Algorithm* • HCII 2022 Paper • [https://doi.org/10.1007/978-3-031-05431-0\\_15](https://doi.org/10.1007/978-3-031-05431-0_15) (C.4.)

**Chao Zhang**, Zili Zhou, Jiayi Wu, Yajing Hu, Yaping Shao, Jianhui Liu, Yuqi Hu, Fangtian Ying, and Cheng Yao. Jun. 2021  
*Bio Sketchbook: An AI-Assisted Sketching Partner for Children's Biodiversity Observational Learning* • IDC 2021 Poster • <https://doi.org/10.1145/3459990.3465197> (C.3.)

**Chao Zhang**, Cheng Yao, Jianhui Liu, Zili Zhou, Weilin Zhang, Lijuan Liu, Fangtian Ying, Yijun Zhao, and Guanyun Wang. May. 2021  
*StoryDrawer: A Co-Creative Agent Supporting Children's Storytelling through Collaborative Drawing* • CHI 2021 Poster • <https://doi.org/10.1145/3411763.3451785> (C.2.)

Muling Huang, Lingyan Zhang, Lijuan Liu, Pinqi Zhu, <b>Chao Zhang</b> , Pitchayapat Sonchaeng, Weiqliang Ying, Pinhao Wang, Yuqi Hu, Fangtian Ying, and Cheng Yao. <i>ColorGuardian: Customize Skin Tattoos for Children with Vitiligo</i> • CHI 2021 Poster • <a href="https://doi.org/10.1145/3411763.3451615">https://doi.org/10.1145/3411763.3451615</a>	May. 2021 (C.1.)
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## Journal Papers

Yang Chen, Katherine Fennedy, Anna Fogel, Shengdong Zhao, <b>Chao Zhang</b> , Lijuan Liu, and Ching Chiuan Yen. <i>SSpoon: A Shape-changing Spoon That Optimizes Bite Size for Eating Rate Regulation</i> • IMWUT 2022 To Appear	Sept. 2022 (J.2.)
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Lijuan Liu, Jiahao Guo, <b>Chao Zhang</b> , Zhangzhi Wang, Pinqi Zhu, Tuo Fang, Junwu Wang, Cheng Yao, and Fangtian Ying. <i>ElectroPaper: Design and Fabrication of Paper-Based Electronic Interfaces for the Water Environment</i> • Electronics 2021 <a href="https://doi.org/10.3390/electronics10050604">https://doi.org/10.3390/electronics10050604</a>	Jan. 2021 (J.1.)
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## PATENTS

<b>China National Invention Patent</b> (Application No. 202011322789.4). <i>A Drawing System to Support Children's Observation of Plants and Learning about Biodiversity</i>	May. 2021 (P.4.)
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<b>China National Invention Patent</b> (Application No. 202011322789.4). <i>A Sketch Recognition and Generation Method based on Raspberry Pi and Recurrent Neural Network</i>	Nov. 2020 (P.3.)
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<b>China National Invention Patent</b> (Application No. 202011322789.4). <i>A Sentiment Analysis and Visualization Method Combining Video and Pop-Ups</i>	Apr. 2019 (P.2.)
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<b>Software Patent</b> (Registration No. 2019SR0428088). <i>Enterprise Network Opinion Analysis and Visualization Software</i>	Feb. 2019 (P.1.)
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## AWARDS & HONORS

<b>iF Talent Award</b> • 2021 iF Design, Germany OneShoe, <a href="https://ifworldddesignguide.com/entry/340348-oneshoe">https://ifworldddesignguide.com/entry/340348-oneshoe</a>	2021-2022 (Selected)
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**Honorable Mention** • 2021 Design Intelligence Award (DIA), China

**Nominations Award** • 2021 International Designer Club Award, Malaysia

**UXD Award** • 2021 User eXperience Design Competition, China

**National Grand Prize (Top 1)** • 2021 C4-AI Innovation Contest, China

**National First Prize (Top 10)** • 2021 Graduate AI Innovation Competition, China

**Outstanding Student Award** • Zhejiang University, China

**Academic Merit Scholarship** • Jiangnan University, China

<b>Academic Merit Scholarship</b> • Jiangnan University, China	2016 - 2020 (Selected)
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**Top 10 University Students Award** • Jiangnan University, China

**Outstanding Graduate Award** • Jiangnan University, China

## EXHIBITIONS

**2022 China Design Exhibition** • China

2021-2022

**2021 Dubai Design Week** • The United Arab Emirates

(Selected)

To Life, <https://globalgradshow.com/project/tolife/>

Silent Delivery, <https://globalgradshow.com/project/silent-delivery/>

**2021 "Ecological Bridge" Innovative Design Exhibition** • China

## SKILLS

**Language** • Mandarin (Native), English (Fluent)

**Design** • User Experience Design (Figma, Sketch, etc.), Product Design (Cinema 4D, Corona Render, Rhinocero, etc.), Generative Design (P5.js, Processing, Grasshopper, etc.), Visual Design (Illustrator, Photoshop, etc.)

**Coding** • Front-End Development (Javascript, HTML, CSS, Vue.js, etc.), Artificial Intelligence (Sklearn, PyTorch, Tensorflow, etc.), Embedded System (Arduino, Raspberry Pi, Sensors, etc.)

**Prototyping** • 3D Printing, Laser Cutting, Fabrication and Hardware Assembly, Basic Circuit Design, etc.

**Data Analysis** • Matplotlib, SPSS, JASP, NVivo, etc.