

Xiaofei Zhou

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Education

Tsinghua University (THU) Aug 2014-Jul 2018

BE in Industrial Engineering with Specialization in **Human Factors**, GPA: 86.29/100.

Carnegie Mellon University (CMU) Jun 2017-Sept 2017

Visiting Researcher in the Human-Computer Interaction Institute, supervised by Prof. Justine Cassell.

Research Experience

Academic Writing Assistance for non-native English speaker | Researcher & Designer Oct 2017-Present

Advisor: Prof. Chun Yu, Department of Computer Science and Technology, Tsinghua University

- Designed and developed the website esoda.org, an online platform for academic English writing assistance with 3000+ average daily visits. Improved its user experience.
- Utilized NLP to analyze how to generate better sentences based on several given key words.

Sensing Curiosity in Play and Responding | Visiting Researcher Jun 2017-Oct 2017

Advisor: Prof. Justine Cassell, Human-Computer Interaction Institute, Carnegie Mellon University

- Submitted to Articulate Lab Journal 2017 | How to WoZ a Virtual Child in a Collaborative Game.***
- Created a 17-iteration UI in Java and designed hardware setup for WoZ (Wizard-of-Oz) study. And conducted the heuristic evaluation and summative usability testing for the WoZ UI.
- Compiled more than 7000 logs of data from previous game play and extracted the typical features of children's game behaviors and strategies in order to build the children's curiosity behavior model.
- Developed methods to evaluate child-robot game collaboration for the whole WoZ system.

Exploratory Research: Overuse and Abstinence of Social Media | Research Assistant Apr 2017-Sept 2017

Advisor: Prof. Patrick Rau, Department of Industrial Engineering, Tsinghua University

- Submitted to CHI 2018 | Overuse and Abstinence of Social Media: A New Approach to Help Social Addicts.***
- Conducted literature research on social media overuse, abstinence and the impact.
- Designed and conducted a 3-week social media abstinence experiment with 33 participants.
- Analyzed qualitative and quantitative data from 490 logs of diary study, interviews and subjective scales. Demonstrated the effectiveness of short-term abstinence to improve productivity, life satisfaction and autonomy, especially for social media addicts.

Gesture-Controlled Home Lighting System | Researcher & Designer Apr 2017-Jun 2017

Advisor: Prof. Chun Yu, Department of Computer Science and Technology, Tsinghua University

- Designed and conducted 35 user studies to collect, classify and analyze 175 logs of gesture data.
- Built 5 user scenarios, designed system interacting rules based on data analysis, and conducted summative usability testing for the interaction lighting system with the technology of VR.

ZOOO: Multimodal Interactive Stage | Research Assistant Sept 2016-Apr 2017

Advisor: Prof. Haipeng Mi, Department of Information Art Design, Tsinghua University

- National Undergraduate Training Program for Innovation and Entrepreneurship***
- ZOOO is an interactive stage including three robot dolls controlled to perform stage shows.
- Designed and constructed the interactive device which is installed with 3 robot dolls.
- Tested the entire interactive system with Arduino programming.

The Effects of Different Music on People with Different Personalities | Researcher Oct 2016-Dec 2016

Advisor: Prof. Wei Zhang, Department of Industrial Engineering, Tsinghua University

- Researched previous literature on how background music affects people's working performance.
- Designed and conducted a 43-participant experiment, in which participants' Extroversion were scaled using Big Five Personality Scale and their concentration and memory span were tested under conditions of different types of background music.
- Analyzed data including qualitative analysis, normal test, and linear correlation analysis.

Design and Development Projects

BoMix: Play Music with Your Body | Researcher & Designer Mar 2017-Jun 2017

- BoMix is an interactive system using Leap Motion, which enables users to play the guitar and drums

with their arms and legs at the same time.

- Led user study with 10 participants, created functionality design, conducted system usability testing.

Intelligent Safe-Sharing | Independent Designer & Developer

Apr 2017-May 2017

- Designed a safe which can be shared with guests using facial recognition and speech recognition. Once it discovers unidentified users, a spare empty space will be activated to protect valuable items.
- Designed the product construction with SketchUp.
- Developed the safe with Python and Arduino programming on Galileo Board and ZOC Terminal.

Experiential Game for Children's Security Education | Researcher & Designer

Feb 2017

- Designed a game teaching children about self-protection by having them experience common dangerous situations. This is a 48-hour project from Global Service Jam of ThoughtWorks, 2017.
- Conducted user research among 7 children and their parents with personas, user scenarios, storyboarding and target user interviews.
- Designed and iterated the game mechanism and UI prototype.

Tsinghua University Course Online Evaluation System | Designer

Jan 2017

- **Semifinalist in the Chancellor Cup (20 in 150), Tsinghua University.**
- This is the first course online evaluation system designed and developed all by undergraduate students at Tsinghua University, aiming to provide students more comprehensive course information.
- Investigated similar apps, where people give ratings to shops, restaurants, and other services
- Iterated and completed the UI design for the course evaluation system.

App: Conquer the Fatigue | Researcher & Designer

Oct 2016

- **Final round of Global Innovation Competition (20 in 249), held by THU and UW.**
- Conquer the Fatigue is an app using smart bracelet technology to detect and predict user's physical and emotional condition and notify users to have a rest when needed.
- Built user scenarios and designed the app UI and product prototype.
- Conducted usability testing by cognitive walkthrough and made a demo video with Final Cut.

Android App: Schedule Box | Independent Designer and Developer

Sept 2016

- The app can schedule your day automatically according to the to-do-list and the user-specified difficulty degree you have entered for each task, which can help you create a more efficient day.
- Designed the app UI and developed the app in App Inventor.

Volunteer and Leadership

Chief editor | Newspaper, Department of Industrial Engineering, Tsinghua University

Sept 2015-Dec 2016

- Developed the web page of the first **electronic newspaper** in HTML5, CSS3 and JavaScript.
- Made arrangement of articles, wrote articles and designed the cover for 4 newspapers with 8 pages.
- Conducted 7 character interviews and wrote the character articles.

"Pass-the-flame" Volunteer Program Member | Tsinghua University

May 2016-Present

- Recorded 4 audio books for blind children in a special school.
- Taught **Creative Writing** in Haidian District School of Migrant Laborers 'Children.
- Participated in pen pal program for children in isolated areas.

Honors and Awards

- 2017, Science and Technology Innovation Award, Department of Industrial Engineering, THU
- 2017, American Mathematical Modeling Contest, Meritorious Winner
- 2016, Outstanding Volunteer for IxDC International Conference of User Experience Design
- 2015-2016, Excellent Volunteer Scholarship, Department of Industrial Engineering, THU
- 2015-2016, Outstanding Social Work Scholarship, Department of Industrial Engineering, THU
- 2015, Tsinghua University Social Practice Golden Prize team

Skills and Others

- **Language:** TOEFL: 110, GRE: (V)157+(Q)167+(AW)3.5, novice speaker of German and Korean.
- **Research & Design:** Diary Study, Interview, Survey | Heuristic Evaluation, Summative Usability Testing, Cognitive Walkthrough| Personas, Scenario, Storyboarding, Eye tracking | Factorial Design, Statistics Analysis| Prototyping, UI Design.
- **Programming:** HTML5, CSS3, JavaScript, R, SQL, Arduino, C, Java, Python.
- **Tools:** Justinmind, Axure, Sketch, SketchUp, Photoshop, Final Cut Pro, Plant Simulation, SPSS, Minitab.