Xiaofei Zhou

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Education

Tsinghua University (THU)   Aug 2014-Jul 2018

   B.Sc. in Industrial Engineering with Specialization in **Human Factors**, GPA: 3.64/4.0.

Carnegie Mellon University (CMU)   Jun 2017-Sept 2017

   Visiting researcher in 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 web for esoda.org, which is an online platform for academic English writing assistance with 3000+ average daily browsing.
- Used the method of NLP to find the relationship between a paper's title and its abstract.

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 ArticuLab Lab Journal 2017 | How to WoZ a Virtual Child in a Collaborative Game.*
- Developed 17-iteration UI in Java and designed hardware setup for WoZ (Wizard-of-Oz) study.
- Conducted heuristic evaluation and summative usability testing for the WoZ UI.
- 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.*
- Literature research on how social media overuse and abstinence affect people's working performance.
- Designed and conducted a social media abstinence experiment with 36 participants.
- Analyzed qualitative and quantitative data from diary study and survey results from 490 logs.

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 gestures and analyzed the results.
- Built user scenarios, designed system interacting rules based on the classified experiment results and conducted summative usability testing for the interaction system.

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.
- Constructed the interactive device which is installed with 3 robot dolls.
- Tested the whole interactive system with Arduino programming.

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

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

- Done literature research on how background music affects people's working performance.
- Designed and conducted a 43-participant experiment, in which participants' Extroversion were scaled and their concentration and memory span were tested in different kinds of background music.
- Contributed to data analysis 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 can enable users to play guitar and drums with their arms and legs like a band.
- Led on user study, functionality design, and system usability testing.

Intelligent Safe-Sharing | Independent Designer & Developer   Apr 2017-May 2017

- *Excellent student works of Intelligent Hardware Design.*

- Designed a safe which can be shared with guests using facial recognition and speech recognition. Once discovered 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.
- Did user research with personas, user scenarios, storyboarding and target user interview.
- Designed and iterated on the game mechanism and UI prototype.

Tsinghua University Course Online Evaluation System | Designer   Jan 2017
- *Semifinal of the Chancellor Cup (20 in 150), Tsinghua University.*
- This is the first course online evaluation system designed and developed all by students in Tsinghua University, aiming at providing students more comprehensive courses information.
- Investigated existing similar apps where people evaluate shops, restaurants and other services in life.
- Done 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 to detect and predict user's physical and emotional condition and notify users to have a rest when needed.
- Built user scenarios, 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 each event's difficulty degree you enter, which can make you spend a more efficient day.
- Designed an Android app for automatic task management and scheduling based on to-do list and user-specified difficulty level
- 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 **electronic newspaper** in HTML5, CSS3 and JavaScript.
- 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.
- Volunteering to teach **Creative Writing** in Haidian District School of Migrant Laborers 'Children.
- Exchanging letters with 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: 105, 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| Persona, Scenario, Storyboarding, Eye tracking | Factorial Design, Statistics Analysis| Prototyping, UI Design.
- **Programming:** HTML5, CSS3, JavaScript, R, SQL, Arduino, C, Java, Python.
- **Tools:** Axure, Sketch, SketchUp, Photoshop, Final Cut Pro, iMovie, Plant Simulation, SPSS, Minitab.