

Xiaofei Zhou

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Education

- Carnegie Mellon University (THU)** Aug 2018-Aug 2019(Expected)
Master of Educational Technology and Applied Learning Science, GPA: 3.95/4.0
- Tsinghua University (THU)** Aug 2014-Jul 2018
BE in Industrial Engineering with Specialization in **Human Factors**, GPA: 3.66/4.0.

Research Experience

- Intelligent Tutoring System for Information Visualization | Researcher** Sept 2018-Present
Advisor: Prof. Ken Keodinger, Human-Computer Interaction Institute, Carnegie Mellon University
- Conducted cognitive task analysis with 11 experts and novices for information visualization.
 - Designed a new instructional model for learning information visualization based on data from CTA.
 - Conducted learner testing with 30 learners and verified the effectiveness of the instructional model.
- Character Creation Assistance Tool | Researcher** Sept 2018-Present
Advisor: Prof. Geoff Kaufman, Human-Computer Interaction Institute, Carnegie Mellon University
- Created storyboards and conducted speed dating for interactive system and experiment design.
 - Analyzed interaction between 10 creators and 3 readers for prior research.
 - Recruited participants for formal experiment and data collection.
- 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
- **Special Award of 36th Challenge Cup, 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.
 - Redesigned with learning principles for its further development and better learner experience.
- A Machine Learning Based KES for Interaction Design | Researcher** Sept 2017-June 2018
Advisor: Prof. Patrick Rau, Department of Industrial Engineering, Tsinghua University
- **A Machine Learning Based Kansei Engineering System for Interaction Design | Under review, CHI2019.**
 - Trained neural net models by transfer learning from BVLC with Matlab, accuracy=84.7%.
 - Conducted neuron analysis to analyzing the rules of kawaii perception for Japanese females. Results showed that Chinese females and Japanese females perceived kawaii differently.
 - Built an auxiliary system for cross-cultural product design.
 - Designed and conducted validation experiments for the cross-cultural design auxiliary system.
- Sensing Curiosity in Play and Responding | Visiting Researcher** Jun 2017-Oct 2017
Advisor: Prof. Justine Cassell, Human-Computer Interaction Institute, Carnegie Mellon University
- 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.
 - Wrote a final research report: How to WoZ a virtual Child in a Collaborative Game.
- Exploratory Research: Overuse and Abstinence of Social Media | Research Assistant** Apr 2017-Sept 2017
Advisor: Prof. Patrick Rau, Department of Industrial Engineering, Tsinghua University
- 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.

Design and Development Projects

- FacenToYourself | Designer & Developer** Dec 2018
- Designed an interactive system which creates music based on users' facial features and emotions.

- Implemented the system with Java, Processing and face detection API.
- ASSETS 2019 Website Design | Visual Design Chair** Nov 2018-Present
- Designed the Logo and website banners for ASSETS 2019.
- GoTracker for Project-Based Learning | Researcher & Designer** Sept 2018-Dec 2018
- User Research: Interviewed 8 experts and stakeholders. Observed learners in context.
 - Created storyboards and conducted speed dating with stakeholders.
 - Designed wireframes, visual interfaces and interaction.
 - Tested system with 5 high school students, analyzed data and iterated design.
- OwlII APP: Xiatiao Camera | Product Intern & UX Designer** Mar 2018-July 2018
- Conducted user research, designed interaction and prototyped with Sketch and Photoshop.
 - Designed and conducted user experience testing.
 - Iterated design for the 2nd version of Xiatiao Camera.
- Experiential Game for Children's Security Education | Researcher & Designer** Feb 2017
- Interviewed target users and created personas, user scenarios and storyboards.
 - Tested prototype and interviewed 12 children and their parents.
 - 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.**
 - 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.**
 - 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.
- ZOOO: Multimodal Interactive Stage | Research Assistant** Sept 2016-Apr 2017
- **National Undergraduate Training Program for Innovation and Entrepreneurship**
 - Designed and constructed the interactive device which is installed with 3 robot dolls.
 - Tested the entire interactive system with Arduino programming.

Volunteer and Teaching Experience

- Chief editor | Newspaper**, Department of Industrial Engineering, Tsinghua University Sept 2015-Dec 2016
- Designed and developed the web page for the **electronic newspaper** in HTML5, CSS3 and JavaScript.
 - Conducted 7 character interviews and wrote the character articles.
- "Pass-the-flame" Teaching Volunteer | 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

- 2018, METALS Tuition/Merit Scholarship, CMU
- 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, Tsinghua University Social Practice Golden Prize team

Skills and Others

- **Language:** Chinese: Native, English: TOFEL 110/120, German: Novice, Spanish: Novice.
- **Research & Design:** Diary Study, Interview, Survey | Heuristic Evaluation, Summative Usability Testing, Cognitive Walkthrough | Personas, User Scenario, Storyboarding, Speed Dating, Eye tracking | Factorial Design, Statistics Analysis| Prototyping, UI Design.
- **Programming:** Matlab, HTML5, CSS3, JavaScript, R, SQL, Arduino, C, Java, Python, Processing.
- **Tools:** Sketch, Invision, SketchUp, Photoshop, Final Cut Pro, Plant Simulation, SPSS, Minitab.