Yirou (Chris) Li

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EDUCATION

University of Waterloo Graduation Date: December 2020

Master of Applied Science in Systems Design Engineering GPA: 88.50/100

University of Illinois at Urbana-Champaign

Bachelor of Science in Industrial Engineering

Graduation Date: May 2018

GPA: 3.70/4.00

Minor in Electrical Engineering, Computer Science

Certificate of Computational Science Engineering in Industrial Engineering

RESEARCH EXPERIENCE

Novel Data Representation for Virtual Reality (VR) Exergames to Promote Physical Activities in Older Adults Living with Dementia

Waterloo, ON, CA

Advisor: Dr. Jennifer Boger

January 2019 – December 2020

- **Objectives:** Develop and evaluate novel visualization representations using data collected through VR exergames to represent the exercise sessions and player status and reduce exercise therapists' workload
- Outcomes:
 - Identified potential metrics that are useful to understand exercise sessions through interviews with 25 exercise professionals
 - Co-developed novel data visualizations with 4 exercise healthcare professionals based on their needs and preference by semi-structured design focus groups
 - Evaluated the proposed data visualizations through mix-method analysis via an online questionnaire (47 respondents) to understand the potential usefulness and identify aspects for further improvements
- Role: Graduate Research Student

Optimize Electronic Health Record (EHR) System for Grand River Hospital

Waterloo, ON, CA

Advisor: Dr. Siby Samuel

March 2019 – June 2019

- **Objectives:** Evaluate the existing EHR system to identify aspects of improvements and provide suggestions for training if necessary
- Outcomes:
 - Conducted literature review on EHR system use, design framework, and evaluation criteria
 - Interviewed healthcare professionals to understand EHR system in comparable healthcare settings
- Role: Graduate Research Assistant

PROFESSIONAL EXPERIENCE

Wolfram Research, Inc.

Champaign, IL, US

User Experience Consultant

June 2018 - Present

- Construct design prototypes to provide UX solutions/recommendations about existing issues or upcoming features in Wolfram Products across different platforms (desktop, web, mobile)
- Conduct user testing and user research to understand user expectations for designed feature to improve the usability of the products
- Arrange weekly meetings with mentors, design team, and development team to clarify usability issues and update prototypes
- Present wireframes on development decision meetings to deliver design recommendations
- Perform necessary user testing and report issues discovered in the products

University of Illinois at Urbana-Champaign

Urbana, IL, US

NetMath Mentor

May 2016 - May 2018

- Contribute to course innovation based on students' performance
- Provide detailed suggestions on material arrangement and contents to be tested on.

- Mentor students through weekly contact and online discussion forum; recommend schedule planning to make sure workload is appropriate for students every week
- Grade students' assignments and guide students to the right approach using Mathematica when they need help by asking relevant questions
- Participate in weekly training and discussions on mentor's discussion forum to interact with other mentors to enhance professional skills

University of Illinois at Urbana-Champaign

Urbana, IL, US

Course assistant at Department of Mechanical Science and Engineering

August 2015 - May 2018

- Teach four discussion sessions with a total number of 80 students reviewing the knowledge covered in the lectures and lead students doing worksheet about real world problems
- Participate in meetings each week to report and discuss course materials as well as approach of teaching with instructors, course staffs, and other scholars in School of Education
- Assist instructors and reaching assistants in office hours and online discussion forum answering questions regarding the course materials and logistics to help the students

ACTIVITIES

Allo Waterloo, ON, CA

Initiative User Experience Consultant

November 2020 - February 2021

- Conduct 50 user interviews to identify pain points of Chinese international students in freshman and sophomore year
- Research existing commercial products and apps to understand the market
- Brainstorm features and functions that would help address the identified problem
- Provide wireframes for primary solution to guide further discussions and development

MUS-NET Live Database

Champaign, IL, US

Research Assistant in Website Design

June 2017 - February 2018

- Design and improve prototype for data processing website to collaborate with MUS-ROVER website for online music learning application
- Final round website tester to make sure the website is ready for user study research
- Design and conduct the user study research about website efficiency by hosting an online competition about music piece transcription with about 100 participants
- Refine the website based on users' feedback, update new functions and rearrange the content to make the website more user friendly

COURSES

• User Interface Design, Experimental Methods in HCI, Cognitive Engineering Methods

SKILLS

- Axure, Intermediate; Sketch, Intermediate; Figma, Intermediate
- Python, Intermediate; Mathematica, Intermediate; Matlab, Intermediate; Java, Intermediate; C, Intermediate; C++, Intermediate; SASS, Intermediate; SPSS, Intermediate; R, beginner
- · Microsoft Office, Professional
- Inventor, Intermediate

Language

- English (fluent)
- Chinese (native)