1624 Geneva Road Ann Arbor, MI 48103

# (APRIL) YI WANG

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#### **EDUCATION**

#### **University of Michigan**

Ann Arbor, MI

September 2018 - Present

- Ph.D. in Information Science
- Research area: Human-Computer Interaction
- Advisors: Professor Steve Oney and Professor Christopher Brooks

### **Simon Fraser University**

**Burnaby**, Canada

**September 2016 - July 2018** 

- Master of Science in the School of Computing Science
- Research area: Human-Computer Interaction
- Master Thesis: Investigating Learning Strategies for Conversational Programmers
- · Advisor: Professor Parmit Chilana

# **Zhejiang University**

Hangzhou, China

**September 2013 – July 2016** 

- Bachelor of Engineering in the College of Computer Science
- Major: Digital Media Technology
- Qizhen Class in Chu Kochen Honors College
- 8 months exchange experience to Simon Fraser University

#### **PUBLICATIONS**

# **Peer-Reviewed Conference Papers**

- [1] April Y. Wang, Anant Mittal, Christopher Brooks and Steve Oney. How Data Scientists Use Computational Notebooks for Real-Time Collaboration. Proceedings of the ACM: Human-Computer Interaction, Computer-Supported Cooperative Work and Social Computing (CSCW 2019) [to appear]
- [2] April Y. Wang and Parmit K. Chilana. Designing Curated Conversation-Driven Explanations for Communicating Complex Technical Concepts. Proceedings of the IEEE Symposium on Visual Languages and Human-Centric Computing (VL/HCC 2019) [to appear]
- [3] April Y. Wang, Ryan Mitts, Philip J. Guo and Parmit K. Chilana. Mismatch of Expectations: How Modern Learning Resources Fail Conversational Programmers. Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2018)
- [4] Laton Vermette, Shruti Dembla, April Y. Wang, Joanna McGrenere and Parmit K. Chilana. (2018) Social CheatSheet: An Interactive Community-Curated Information Overlay for Web Applications. Proceedings of the ACM: Human-Computer Interaction (1,1), Computer-Supported Cooperative Work and Social Computing (CSCW'18)

## **Workshop Paper and Poster**

- [5] **April Y. Wang**, Steve Oney and Christopher Brooks. (2019) **Redesigning Notebooks for Data Science Education.** Workshop on Human-Centered Study of Data Science Work Practices at ACM Conference on Human Factors in Computing Systems (CHI'19)
- [6] April Y. Wang and Parmit K. Chilana. (2017) Investigating Learning Strategies of Conversational Programmers. International Conference on Computing Education Research (ICER'17)

#### **HONORS AND AWARDS**

2018 Academic Year Best Paper Honorable Mention

The ACM CHI Conference on Human Factors in Computing Systems (CHI 2018, top 5%)

Computing Science Graduate Fellowship

Awarded by Simon Fraser University

Computing Science Graduate Fellowship

2016 Academic Year Computing Science Graduate Fellowship

Awarded by Simon Fraser University

2015 Academic Year Fellowship for Internship (Second Place)

Awarded by Zhejiang University

2014 Academic Year Fellowship for Academic Performance (Third Place)

Awarded by Zhejiang University

## **RESEARCH EXPERIENCE**

### Conversational Programmer [3, 6]

Thesis

May 2017 - May 2018

- Research question: "How can we better support the learning needs of conversational programmers who are motivated to learn programming to improve their participation in technical conversations?"
- Reviewed prior works on non-traditional learner populations and how people interact with formal and informal programming learning resources
- Conducted interviews with 23 conversational programmers to investigate their learning strategies
- Collected, coded, and analyzed data using ATLAS.ti
- Used an inductive analysis approach and affinity diagrams to explore the themes under the guidance of Prof.
   Parmit Chilana and Prof. Philip Guo

# Social CheatSheet [4]

# **Research Assistant**

January 2017 - May 2017

- Research question: "How do users perceive the usability and usefulness of Social CheatSheet an interactive community-curated information overlay for web applications?"
- Assisted running a weeklong field deployment using a task-based approach
- Recruited 15 participants on campus
- Designed deployment tasks on university's learning management system
- Made the demo video for this project

## **Real-time SSS Rendering**

## **Undergraduate Capstone Project**

October 2015 - June 2016

- Explored real-time human skin rendering algorithms with realistic subsurface scattering(SSS) effect, under the guidance of Prof. Tianlei Hu
- Implemented the SSS rendering algorithms using OpenGL/C++

# **Emotive AI Reactive Characters**

**Undergraduate Research Assistant** 

January 2015 - May 2015

- Undergraduate research assistant in the iVizLab, SFU SIAT, under the guidance of Prof. Steve DiPaola
- Assisted with scripting in Unreal Engine to connect the virtual characters with corresponding poses

#### **Realistic Rendering of Sea Ice**

**Undergraduate Research Assistant** 

October 2013 - March 2014

- Undergraduate research assistant in CAD/CG Lab, Zhejiang University, guided by Prof. Zhangye Wang
- Assisted with building the 3D sea ice model in AutoCAD for testing the rendering algorithm

# **ACADEMIC SERVICE**

Reviewer CSCW'19, CHI'19, TEI'19, AIED'19 Student Volunteer CHI'19

#### **STUDENTS MENTORED**

- Zihan Wu, undergraduate summer intern student, Tsinghua University, 2019
- · Natalie Gross, BSI student, University of Michigan, 2018
- Jamie Neumann, BSI student, University of Michigan, 2018
- Rebecca Parada, BSI student, University of Michigan, 2018
- Ryan Mitts, Undergraduate student, Simon Fraser University, 2017

#### **TEACHING EXPERIENCE**

# Simon Fraser University

- Teaching Assistant, CMPT363 User Interface Design, Spring 2017
- Teaching Assistant, CMPT363 User Interface Design, Spring 2018

## **WORK EXPERIENCE**

#### **NetEase Game**

## **Junior Software Developer Intern**

October 2015 - July 2016

- Joined the game engine development group at Pangu Game Studio
- Improved the wind simulation algorithm and integrated it into Tianyu Revelation Online using DX11
- · Learned shader debugging skills using Intel GPA Frame Analyzer
- Implemented the wind textual generator in Python/QT for designers to build the assets

#### **Intel China Research Centre**

**User Experience Designer Intern** 

May 2015 - September 2015

- Participated in the open-sourced project IoT Service Orchestration Layer a block-based programming solution for end users to personalize IoT applications
- · Assisted with gathering requirements
- Conducted the pilot testing on the low fidelity prototypes made by Axure
- Created high fidelity prototypes in Photoshop
- Made several demo videos in After Effects

## **Alibaba Corporation**

## **User Experience Designer Intern**

June 2014 - September 2014

- Assisted with the heuristic evaluation of Aitaobao, a social sharing shopping website
- Identified several usability problems with user engagement