

## CONTACT INFORMATION

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## RESEARCH INTERESTS

On-demand collaboration in programming, programming support tools, crowdsourcing.

## EDUCATION

University of Michigan, Ann Arbor, MI, US  
Ph.D. in Information Science (2014 - present)  

- Advisor: Steve Oney
- Committee: Mark Ackerman, Mark Guzdial, Philip Guo

University of Colorado, Boulder, CO, US  
M.S in Applied Mathematics (2013 - 2014)  

- Master Thesis: Asymptotic Series Solutions To One-Dimensional Helmholtz Equation
- Thesis Advisor: Harvey Segur

University of Colorado, Boulder, CO, US  
B.S. in Applied Mathematics and B.S. in Electrical and Computer Engineering (2011 - 2014)

## CONFERENCE PAPERS AND JOURNALS

- [11]. Jie-Wei Wu, Licheng Zhu, Lei Zhang, **Yan Chen**, and Steve Oney. A Survey & Comparison of Annotations and Telepresence for Remote Guidance in Augmented Reality. (*under review*).
- [10]. **Yan Chen**, Sang Won Lee, and Steve Oney. CoCapture: Effectively Communicating UI behaviors by Demonstrating and Remixing. (*under review*).
- [9]. April Yi Wang\*, **Yan Chen\***, John Joon Young Chung, Christopher Brooks, and Steve Oney. PuzzleMe: Leveraging Peer Assessment for In-Class Programming Exercises. (*under review*).
- [8]. **Yan Chen**, Walter S. Lasecki, and Tao Dong. Towards Supporting Programming Education at Scale via Live Streaming. In *Proceedings of the International ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2020)*.
- [7]. **Yan Chen**, Jaylin Herskovitz, Walter S. Lasecki, and Steve Oney. A Hybrid Crowd-Machine Workflow for Program Synthesis. IEEE Symposium on Visual Languages and Human-Centric Computing *VL/HCC '20*.
- [6]. **Yan Chen**, Jaylin Herskovitz, Gabriel Matute, April Wang, Sang Won Lee, Walter S. Lasecki, and Steve Oney. EdCode: Towards Personalized Support at Scale for Remote Assistance in CS Education. IEEE Symposium on Visual Languages and Human-Centric Computing *VL/HCC '20*.
- [5]. **Yan Chen**, Maulishree Pandey, Jean Y. Song, Walter S. Lasecki, and Steve Oney. Improving Crowd-Supported GUI Testing with Structural Guidance. In *Proceedings of the International ACM Conference on Human Factors in Computing Systems (CHI 2020)*, Hawaii, USA.
- [4]. **Yan Chen**, Andres Monroy-Hernandez, Ian Wehrman, Steve Oney, Walter S. Lasecki, Rajan Vaish. Sifter: A Hybrid Workflow for Theme-based Video Curation at Scale. In *Proceedings of the International ACM Conference on Interactive Media Experiences (IMX 2020)*, Barcelona,

Spain.

[3]. **Yan Chen**, Sang Won Lee, Yin Xie, Yiwei Yang, Walter S. Lasecki, Steve Oney. Codeon: On-Demand Software Development Assistance. In *Proceedings of the International ACM Conference on Human Factors in Computing Systems (CHI 2017)*, Denver, USA.

[2]. **Yan Chen**, Steve Oney, Walter S. Lasecki. Towards Providing On-Demand Expert Support for Software Developers. In *Proceedings of the International ACM Conference on Human Factors in Computing Systems (CHI 2016)*, San Jose, USA.

[1]. Vishal Patel, Tom Yeh, M Salem, Yangmuzzi Zhang, **Yan Chen**, Rama Chellappa, Larry Davis. Screen Fingerprints: a Novel Modality for Active Authentication. *IT Professional* 15, no. 4 (2013):38-42.

#### OTHER PUBLICATIONS

[8]. **Yan Chen**, Jasmine Jones, Steve Oney. On-demand Programming Assistance. New Future of Work Symposium at Microsoft Research.

[7]. Yan Chen. Mocking-up Desired UI Behaviors from UI Element-Based Recording. Graduate Consortium at *IEEE Symposium on Visual Languages & Human-Centric Computing (VL-HCC'19)*.

[6]. **Yan Chen**, Steve Oney, and Walter S. Lasecki. Enhancing Context and Guidance for Asynchronous Collaboration. Poster at *Human Computer Interaction Consortium (HCIC'18)*.

[5]. Sang Won Lee, **Yan Chen**, and Walter S. Lasecki. Speech-To-Tasks: Real-Time Crowd Generation of Task Lists from Speech. Demo at *The AAAI Conference on Human Computation (HCOMP '17)*.

[4]. Sang Won Lee, **Yan Chen**, Noah Klugman, Sai R. Gouravajhala, Angela Chen, and Walter S. Lasecki. Exploring Coordination Models for Ad Hoc Programming Teams. Late-Breaking-Work at *International ACM Conference on Human Factors in Computing Systems (CHI 2017)*, Denver, USA.

[3]. **Yan Chen**, Steve Oney, Walter S. Lasecki. Expert Crowd Support Systems for Software Developers. Collective Intelligence 2016, New York, USA. (Oral presentation)

[2]. **Yan Chen**, Steve Oney, Walter S. Lasecki. Automatically Capturing Context to Create Microtasks for Software Development. Workshop at *International ACM Conference on Human Factors in Computing Systems (CHI 2016)*, San Jose, USA.

[1]. Esther Vasiete, **Yan Chen**, Ian Char, Tom Yeh, Vishal Patel, Larry Davis, Rama Chellappa. Toward a non-intrusive, physio-behavioral biometric for smartphones. In *Proceedings of the 16th international conference on Human-computer interaction with mobile devices & services. (MobileHCI 2014)*, pp. 501-506. Toronto, Canada.

#### TEACHING EXPERIENCE

University of Michigan, Ann Arbor, MI, US

- Introduction to Programming (with Anthony Whyte), (Fall 2019)
- User Interface Development (with Walter Lasecki), (Winter 2019)
- User Interface Development (with Mark Guzdial), (Fall 2018)
- User Interface Development (with Mark Ackerman), (Fall 2017)
- Introduction to Programming (with Steve Oney and Paul Resnick), (Fall 2016)
- Data Visualization (with Eytan Adar), (Fall 2015)

PROFESSIONAL  
EXPERIENCE

Google, Mountain View, CA, US

- UX Research Intern, (May. 2019 - Aug. 2019)
- Mentors: Dr. Tao Dong  
Supporting programming learning via live streaming

Snap Inc., Seattle, WA, US

- Research Intern, (Jan. 2018 - Apr. 2018)
- Mentors: Dr. Andres Monroy-Hernandez and Dr. Rajan Vaish  
Interviewed with staffed Snap Story curators on their curation tools experience. Drew design implications. Developed a hybrid-machine workflow and system for rapid video curation. Conducted a large-scale (30k+ video) study to explore the effectiveness of the approach.

Harvard University, Cambridge, MA, US

- Undergraduate Research Intern, (Jun. 2013 - Aug. 2013)
- Advisors: Dr. Katharina Reinecke, Professor Krzysztof Gajos  
Developed a web application that quantifies websites' aesthetics and predicts visual preference of people with different cultural background.

University of Colorado, Boulder, CO, US

- Research Assistant, (Sep. 2012 - May 2014)
- Advisor: Professor Tom Yeh  
Developed and conducted in-lab experiments for the DARPA active authentication project on personal computer and smart phone. Applied image and video processing techniques for pattern recognition.

University of Colorado, Boulder, CO, US

- Research Assistant, (Sep. 2012 - May 2014)
- Advisor: Professor Harvey Segur  
Generalized hyperasymptotic series mechanism to approximate other functions. Discovered unavoidable oscillation in hyperasymptotic series mechanism.

STUDENTS  
SUPERVISED

University of Michigan

- **Muhan Zhao** (Summer 2020 - present), undergrad at UMich.
- **Yunjie Guo** (Summer 2020- present), undergrad at UMich.
- **Ruidong Liu** (September 2019 - December 2019), undergrad at UMich.
- **Yiwei Yang** (Fall 2015 - Spring 2016), now PhD student at UWashington.
- **Gabriel Matute** (Fall 2016 - present), undergrad at UMich.
- **Jaylin Herskovitz** (Fall 2016 - present), now PhD student at UMich.
- **Yin Xie** (Summer 2016), now interaction designer at Internet Brands.

University of Colorado at Boulder

- **Ian Char** (Fall 2013 - Spring 2014), now PhD student at CMU.

## SERVICE

Paper reviewing

- PC: HCOMP Demo/WiP '17, CHI LBW'19
- Reviewer for CHI '16-'20, UIST '16-'20, CSCW '17-'19

Led "POSSE Workshop: Introduction to Web Programming" (Workshop) @ POSSE Foundation, 2018, Ann Arbor, MI, United States

Michigan Interactive and Social Computing Research Group (MISC) student coordinator ('19)

- HONORS & AWARDS    Special Recognition Received for Excellent Review CHI'19.
- Selected as a HCIC-Funded Student in University of Michigan to participate in Human Computer Interaction Consortium(HCIC) 2018 "AI & HCP".
- University of Michigan Rackham Graduate School Student Travel Grant ('16, '17, '20)
- University of Michigan School of Information Student Travel Grant ('16, '17, '20)
- PRESS                Best practice guidance for live streaming programming, Google (2019)  
(youtube: <https://bit.ly/36W0Pkg>)
- Best practices for hosting a live streaming coding session, Google (2019)  
(medium: <https://bit.ly/2SfEavb>)