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 $4817~\mathrm{Bob}$  and Betty Beyster Building

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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

- [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, Yangmuzi 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.* (Mobile HCI 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 & HCI".

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)