Yan Chen

Curriculum Vitae updated July 2020

Contact Information

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http://chensivan.github.io/

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

[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, 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. (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 & 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)