Yiwei Yang

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Computer Science & Engineering

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Education

09/2015 – Now *Ann Arbor, MI*	**University of Michigan** B.S. in Computer Science Engineering Advisor: Walter Lasecki

Projects

09/2015 – 02/2017 *Ann Arbor, MI* *Assistant*	**Codeon: On-Demand Software Development Assistance** • Built chat window to enable communication between end-user and helpers • Enhanced user interface to help users learn the tool more quickly • Conducted user studies to observe how people code with remote asynchronous assistance
03/2016 – 05/2017 *Ann Arbor, MI* *Assistant*	**Remixing Animations for More Effective Crowd-Powered Prototyping of Interactive Interfaces** • Developed animation path feature that allows crowd workers to visualize and modify the path of the moving object in an animation • Programmed animation awareness feature to facilitate the collaboration of crowd workers
01/2017 – 05/2017 *Ann Arbor, MI* *Assistant*	**Preserving Privacy in Crowd-Powered Systems** • Tested and debugged the web system so that it properly segments images and distributes segmentations to crowd workers
05/2017 – 09/2017 *Ann Arbor, MI* *Co-Lead*	**Bolt: Instantaneous Crowdsourcing Via Just-in-Time Training** • Pioneered a "look ahead" approach that sends crowd players snapshots of possible future states of the game, collects and aggregates their inputs, reducing the average dodging speed from 553 ms to under 4ms • Developed Lightning Dodger, a turn-based web system to evaluate the effect of the "look ahead" approach in reducing response time of crowd-powered systems
09/2017 – 04/2018 *Ann Arbor, MI* *Lead*	**Identifying Affordances of Never-Before-Seen Objects** • Created a web system to allow crowd workers to depict possible movements of objects in 3D, where users can use arrows to indicate positions and orientations over time
05/2018 – present *San Jose, CA* *Lead*	**Learning Explainable and Generalizable Classifier** • Developed an UI to facilitate the exploration and understanding of semantic rules learned using deep learning

Professional Experience

09/2015 – Now
Ann Arbor, MI
Crowds and Machines Lab, University of Michigan
Undergraduate Researcher (Advisor: Dr. Walter Lasecki)
Developed multiple crowd-powered systems that incorporate both human and machine intelligence to address problems that cannot be solved by either alone

05/2018 – 08/2018
San Jose, CA
IBM Research, Almaden
Research Intern (Advisor: Dr. Yunyao Li)
Developed a hybrid intelligent system to create a white-box model that outperforms some of the existing competitive opaque models

Publications

Conference Full Papers:

C1 Y. Chen, S. W. Lee, Y. Xie, **Y. Yang**, W. S. Lasecki, S. Oney. Codeon: On Demand Software Development Assistance. In Proceedings of the International ACM Conference on Human Factors in Computing Systems (CHI 2017), Denver, USA.

C2 H. Kaur, M. Gordon, **Y. Yang**, J. Teervan, E. Kamar, J. Bigham, W. S. Lasecki. CrowdMask: Using Crowds to Preserve Privacy in Crowd-Powered Systems via Progressive Filtering. In AAAI Conference on Human Computation Demos (HCOMP 2017), Quebec City, CAN.

C3 S. W. Lee, Y. Zhang, I. Wong, **Y. Yang**, S. D. O'Keefe, W. S. Lasecki. SketchExpress: Remixing Animations For More Effective Crowd-Powered Prototyping Of Interactive Interfaces. In Proceedings of the ACM Symposium on User Interface Software and Technology (UIST 2017). Quebec City, Canada.

C4 A. Lundgard, **Y. Yang**, M. L. Foster, W.S. Lasecki. Bolt: Instantaneous Crowdsourcing via Just-in-Time Training. In Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2018). Monstral, Canada.

Poster:

P1 S. W. Lee, **Y. Yang**, S. Yan, Y. Zhang, I. Wong, Z. Yan, M. McGruder, C. M. Homan, W. S. Lasecki. Creating Interactive Behaviors in Early Sketch by Recording and Remixing Crowd Demonstrations. In AAAI Conference on Human Computation Demos (HCOMP 2016), Austin, TX.