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|  | Yiwei Yang | |
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|  | **University of Michigan** |  |
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|  | **Education** | |
| *09/2015 – 05/2019*  *Ann Arbor, MI* | **University of Michigan**  B.S. in Computer Science and Engineering  Advisor: Prof. Walter S. Lasecki | |
|  | **Professional Experience** | |
| *09/2015 – present*  *Ann Arbor, MI* | **Crowds and Machines Lab, University of Michigan**  Research Assistant (Advisor: Prof. Walter Lasecki)  Developed crowd-powered systems that combine human and machine intelligence to solve a variety of problems ranging from sketching expressive animations to generating informative and easy-to-answer clarification questions | |
| *05/2018 – 08/2018*  *San Jose, CA* | **IBM Research, Almaden**  Research Intern (Advisor: Dr. Yunyao Li)  Introduced a novel interaction paradigm that leverages deep learning and NLP engineers to co-create an interpretable and generalizable model on sentence classification; this work is featured on IBM Research Blog <https://www.ibm.com/blogs/research/2019/07/heidl-acl2019/> | |
|  | **Research Projects** | |
| *07/2019 – present*  *U of M*  *Lead* | **Generating User-efficient Clarification Questions**  Worked on a human-machine hybrid approach that leverages human intelligence and ranking by information gain to select questions that balance the trade-off between information gain and answerability | |
| *05/2019 – present*  *U of M*  *Lead* | **Active Learning by Sampling Rules**  Worked on a novel active learning paradigm which samples rules that cover batches of examples with an accuracy, and solicits people to refine rules; rules act as an indirection between examples and people | |
| *05/2018 – 05/2019*  *IBM Research*  *Lead* | **Learning Linguistic Expressions with Deep Learning and Human-in-the-Loop**  Worked on a novel human-in-the-loop interaction paradigm which learns first-order-logic rules with deep learning and recruits people to select rules that generalize beyond the training data | |
| *09/2017 – 04/2018*  *U of M*  *Lead* | **Specifying Affordances of Objects**  Worked on a crowdsourcing method to teach robots on how to interact with never-before-seen objects | |
| *05/2017 – 09/2017*  *U of M*  *Co-Lead* | **Bolt: Instantaneous Crowdsourcing Via Just-in-Time Training**  Worked on a “look-ahead” approach which breaks the cognitive barrier of humans by predicting possible future states and fetching actions to each state beforehand through crowdsourcing | |
| *01/2017 – 05/2017*  *U of M*  *Assistant* | **Preserving Privacy in Crowd-Powered Systems**  Worked on a crowd-powered system which leverages people to filter sensitive information of images by showing segments at increasing level of granularities | |
| *03/2016 – 05/2017*  *U of M*  *Assistant*  *09/2015 – 02/2017*  *U of M*  *Assistant* | **Remixing Animations for More Effective Crowd-Powered Prototyping of Interactive Interfaces**  Developed a feature that allows users to visualize and modify the path of objects in an animation; tested and debugged the system to run user studies  **Codeon: On-Demand Software Development Assistance**  Developed a chat window to enable communication between the user and the helper; helped conduct user studies | |
|  | **Publications** | |
| P.07 | **Y. Yang.**, E. Kandogan, Y. Li, W.S.Lasecki, P.Sen. HEIDL: Learning Linguistic Expressions with Deep Learning and Human-in-the-Loop. *In Proceedings of the Association for Computational Linguistics (ACL 2019*). *Florence, Italy.*  (**Best Poster** at Michigan AI Symposium, 1/55) | |
| *P.06* | **Y. Yang.**, E. Kandogan, Y. Li, W.S.Lasecki, P.Sen. A study on Interaction in Human-in-the-Loop Machine Learning for Text Analytics. *Joint Proceedings of the ACM IUI 2019 Workshops co-located with the 24th ACM Conference on Intelligent User Interfaces (ACM IUI 2019)*, *Los Angeles, USA,* March 20, 2019. | |
| *P.05* | 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*. | |
| *P.04* | 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.* | |
| *P.03* | H. Kaur, M. Gordon, **Y. Yang**, J. Teevan, 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.* | |
| *P.02* | 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.* | |
| *P.01* | 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.* | |