

Shaohua Yang

- CONTACT INFORMATION** 428 S. Shaw Lane, East Lansing, MI, 48824 +1-(517)-775-7619
<https://www.cse.msu.edu/~yangshao/> yangshao@msu.edu
- RESEARCH** Natural Language Processing, Language and Vision, Commonsense Reasoning.
- EDUCATION**
- Michigan State University**, East Lansing, MI
Ph.D. Student, Computer Science and Engineering, *Expected: Spring 2019*
- Research Interests: *Grounded Language Learning and Situated Human-Robot Dialogue*
 - Advisor: Dr. Joyce Y. Chai
 - GPA: 3.93/4.0
- Shanghai Jiao Tong University**, Shanghai, China
M.S., Computer Science, September 2010 - June 2013
- Research Focus: *Chinese Language Processing*
 - Advisor: Dr. Hai Zhao
 - GPA: 3.81/4.0
- Xi'an Jiao Tong University**, Xi'an, China
B.S., Software Engineering, September 2006 - June 2010
- GPA: 85/100
- EXPERIENCE**
- Applied Scientist Intern** May 2017 - August 2017
Alexa AI Science of Amazon, California, US.
- Compare different methods including Hierarchical LSTM and GBDT for automatic prediction of human ratings based on alexa prize dataset. Explore meaningful semantic features to improve GBDT performance[NIPS'17(workshop)].
- Researcher** August 2012 - January 2013
Department of Computer Engineering in Nanyang Technology University, Singapore
- Advisor: Dr. Ivor Tsang
 - Exploration of the performance of the coreference resolution system based on the domain adaption configuration.
- Graduate Research Assistant** September 2010 - June 2013
Center for Brain-like Computing and Machine Intelligence in Shanghai Jiao Tong University, Shanghai, China
- Advisor: Dr. Hai Zhao
 - Proposed a rule based spell checking algorithm and a statistical criteria based algorithm with limited resources based on a reasonable assumption, and optimized them through a hybrid method[LREC'12].
 - Proposed a reasonable framework base on the Machine Translation (MT) to re-formulize the Pinyin To Chinese(PTC) problem as the translation problem, and compared our result with the Maximum Entropy model Baseline to prove its effective both on time and accuracy[PACLIC'12].
- Software Engineer Intern** June 2011 - August 2011
Cootek, Shanghai, China
- Development of English Sliding Input Method based on C and Linux platform.
- PUBLICATIONS**
- [EMNLP'18] **Commonsense Justification for Action Explanation**
Shaohua Yang, Qiaozhi Gao, Sari Saba-Sadiya, Joyce Y. Chai
Conference on Empirical Methods in Natural Language Processing (EMNLP), Brussels, Belgium, November 1-4, 2018.
 - [IJCAI-ECAI'18] **Language to Action: Towards Interactive Task Learning with Physical Agents**
Joyce Y. Chai, Qiaozhi Gao, Lanbo She, Shaohua Yang, Sari Saba-Sadiya, Guangyue Xu
Proceedings of the 27th International Joint Conference on Artificial Intelligence and 23rd European Conference on Artificial Intelligence (IJCAI-ECAI), Stockholm, Sweden, July 13-19, 2018. (Invited Paper).
 - [ACL'18] **What Action Cause This? Towards Naive Physical Action-Effect Prediction**
Qiaozhi Gao, Shaohua Yang, Joyce Y. Chai, Lucy Vanderwende

Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (ACL), Melbourne, Australia, July 15-20, 2018.

- [NIPS'17(Workshop)] **On Evaluating and Comparing Conversational Agents**
Anu Venkatesh, Chandra Khatri, Ashwin Ram, Fenfei Guo, Raefer Gabriel, Ashish Nagar, Rohit Prasad, Ming Cheng, Behnam Hedayatnia, Angeliki Metallinou, Rahul Goel, **Shaohua Yang**, Anirudh Raju
NIPS 2017 Conversational AI workshop, Long Beach, 2017
- [EMNLP'16] **Joint Learning Task Structures from Language Instruction and Visual Demonstration**
Changsong Liu*, **Shaohua Yang***, Sari Saba-Sadiya, Nishant Shuka, Yunzhong He, Songchun Zhu, and Joyce Y. Chai.
Conference on Empirical Methods in Natural Language Processing (EMNLP), Austin, Texas, November 1-5, 2016. (* equal contribution)
- [ACL'16] **Physical Causality of Action Verbs in Grounded Language Understanding**
Qiaozhi Gao, Malcolm Doering, **Shaohua Yang** and Joyce Y. Chai.
Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (ACL), Berlin, Germany, August 7-12, 2016.
- [NAACL'16] **Grounded Semantic Role Labeling**
Shaohua Yang, Qiaozhi Gao, Changsong Liu, Caiming Xiong, Songchun Zhu and Joyce Y. Chai.
Proceedings of the 15th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT), San Diego, CA, June 12-17, 2016.
- [SIGDIAL'14] **Back to the blocks world: Learning new actions through situated human-robot dialogue**
Lanbo She, **Shaohua Yang**, Yu Cheng, Yunyi Jia, Joyce Y Chai, and Ning Xi.
Proceedings of 15th SIGDIAL Meeting on Discourse and Dialogue, Philadelphia, PA, June 18-20, 2014.
- [ROMAN'14] **Teaching robots new actions through natural language instructions**
Lanbo She, Yu Cheng, Joyce Y Chai, Yunyi Jia, **Shaohua Yang**, Ning Xi
The 23rd IEEE International Symposium on Robot and Human Interactive Communication(ROMAN), Edinburgh, Scotland, UK, August 25-29, 2014.
- [PACLIC'12] **A machine translation approach for chinese whole-sentence pinyin-to-character conversion**
Shaohua Yang, Hai Zhao, and Bao-Liang Lu.
Proceedings of the 26th Pacific Asia Conference on Language, Information, and Computation(PACLIC), Bali, Indonesia, 2012.
- [LREC'12] **Spell Checking for Chinese**
Shaohua Yang, Hai Zhao, Xiaolin Wang and Bao-Liang Lu.
The eighth international conference on Language Resources and Evaluation (LREC), Istanbul, Turkey, 2012.

TECHNICAL SKILLS

- Tools: Pytorch, Tensorflow, XGBoost.
- Language: Java, Python, C, Javascript.
- Fluent English, Native Chinese.