Qi Zhang

517, Science and Technology Building, Columbia, SC 29208
qz5@cse.sc.edu (734)846-0663 https://qizhg.github.io

Education

PhD, Computer Science and Engineering — Aug 2015 - Apr 2020
University of Michigan, Ann Arbor, MI, USA
Division: Artificial Intelligence
Advisors: Edmund Durfee and Satinder Singh

Bachelor of Engineering, Department of Electrical Engineering — Sept 2011 - July 2015
Shanghai Jiao Tong University, Shanghai, China

Professional Experience

University of South Carolina, Columbia, SC — Aug 2020 - Present
Assistant Professor, Computer Science and Engineering
Faculty, Artificial Intelligence Institute

University of Michigan, Ann Arbor, MI — Aug 2015 - Apr 2020
Graduate Student Research Assistant

IBM Thomas J. Watson Research Center, New York — Summer 2018
Research Intern
Mentors: Xiaoxiao Guo, Gerald Tesauro, and Murray Campbell

Publications

1. **Knowledge Infused Policy Gradients for Adaptive Pandemic Control.**
   Kaushik Roy, Qi Zhang, Manas Gaur, Amit Sheth.
   AAAI-MAKE at AAAI Spring Symposium 2021.

2. **Efficient Querying for Cooperative Commitments.**
   Qi Zhang, Edmund Durfee, Satinder Singh.
   In the 35th AAAI Conference on Artificial Intelligence (AAAI 2021);
   also presented in 11th International Workshop on Optimization and Learning in Multiagent Systems (OptLearnMAS 2020).

3. **Semantics and Algorithms for Trustworthy Commitment Achievement under Model Uncertainty.**
   Qi Zhang, Edmund Durfee, Satinder Singh.
   Autonomous Agents and Multi-agent Systems, 34(1), 19.

4. **Modeling Probabilistic Commitments for Maintenance Is Inherently Harder than for Achievement.**
   Qi Zhang, Edmund Durfee, Satinder Singh.
   In the 34th AAAI Conference on Artificial Intelligence (AAAI), pp. 10326-10333, 2020;
   also presented in the AI Safety workshop at the 28th International Joint Conference on Artificial Intelligence (IJCAI), 2019.

5. **Learning to Communicate and Solve Visual Blocks-World Tasks.**
   Qi Zhang, Richard Lewis, Satinder Singh, Edmund Durfee.
   In the 33rd AAAI Conference on Artificial Intelligence (AAAI), pp. 5781-5788, 2019.

6. **Challenges in the Trustworthy Pursuit of Maintenance Commitments under Uncertainty.**
   Qi Zhang, Edmund Durfee, Satinder Singh.
   In the 20th Trust Workshop at the International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), pp. 75-86, 2018.

7. **Minimizing Maximum Regret in Commitment Constrained Sequential Decision Making.**
   Qi Zhang, Satinder Singh, Edmund Durfee.
   In the 27th International Conference on Automated Planning and Scheduling (ICAPS), pp. 348-357, 2017.

8. **Commitment Semantics for Sequential Decision Making Under Reward Uncertainty.**
   Qi Zhang, Edmund Durfee, Satinder Singh, Anna Chen, Stefan Witwicki.
   In 25th International Joint Conference on Artificial Intelligence (IJCAI), pp. 3315-3323, 2016.

9. **Incentivize Crowd Labeling under Budget Constraint.**
   Qi Zhang, Yutian Wen, Xiaohua Tian, Xiaoying Gan, Xinbing Wang.
   In 2015 IEEE Conference on Computer Communications (INFOCOM), pp.2812-2820, 2015.

10. **Quality-Driven Auction based Incentive Mechanism for Mobile Crowd Sensing.**
    Yutian Wen, Jinyu Shi, Qi Zhang, Xiaohua Tian, Zhengyong Huang, Hui Yu, Yu Cheng, Xuemin (Sherman) Shen.
    IEEE Transactions on Vehicular Technology, 64(9), 4203-4214, 2015.

Professional Service

Reviewer/Program Committee:
ICLR'21, AAAI'19, ICML'19, NeurIPS'19 and '20, NeurIPS'19 and '20 Deep RL Workshop

NSF Reviewer, 2021

Honors & Awards

Nominated by CSE at University of Michigan for ACM Dissertation Award, 2020

Towner Prize for Outstanding Ph.D. Research (Nominee), University of Michigan, 2019

Rackham Conference Travel Grant, University of Michigan, 2016, 2017, 2019

Talks & Presentations

Invited Talk. Department of CSE, University of South Carolina. Mar 6th, 2020.

Invited Talk. Department of CS, University of New Hampshire. Feb 20th, 2020.

Invited Talk. Auton Lab, Carnegie Mellon University Feb 20th, 2020.

Teaching

Topics on Reinforcement Learning, Spring 2021, University of South Carolina
Artificial Intelligence, Fall 2020, University of South Carolina