ANQI LI

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EDUCATION

Georgia Institute of Technology, School of Interactive Computing August 2017 - Present
PhD in Robotics *Atlanta, GA*

· Advisor: Prof. Magnus Egerstedt & Prof. Byron Boots
· GPA: 4.00/4.00

Carnegie Mellon University, The Robotics Institute August 2015 - May 2017
Masters in Robotics *Pittsburgh, PA*

· Advisor: Prof. Katia Sycara
· GPA: 4.00/4.00

Zhejiang University, College of Control Engineering September 2011 - July 2015
Bachelor of Engineering Automation Major *Hangzhou, CHINA*

· GPA: 3.93/4.00 (89.98/100), Rank: 1/132

RESEARCH EXPERIENCE

Georgia Institute of Technology August 2017 - Present
Graduate Research Assistant *Atlanta, GA*

- Formally Correct Behavior Composition for Teams of Autonomous Robot
  Proposed a framework that ensures correct-by-construction behavior compositions for teams of autonomous robot using Control Barrier Functions (CBFs).
  Validated the framework through simulations and experiments on the Robotarium, a remotely accessible swarm robotics testbed.
- Machine Learning for Multi-Robot Systems
  Investigated the application of Reinforcement Learning (RL) and Imitation Learning (IL) on multi-robot systems

Microsoft Corporation June 2017 - August 2017
Research Intern *Redmond, WA*

- Video Synthesis from Static Images with Generative Adversarial Network
  Proposed a deep learning approach based on Generative Adversarial Networks (GANs) to generate videos from static images.
  Developed two tutorials on Generative Adversarial Networks (GANs) for Microsoft Cognitive Toolkit.

Carnegie Mellon University October 2015 - May 2017
Graduate Research Assistant *Pittsburgh, PA*

- Topology-Based Coordination of Large Teams of Robots
  Proposed a decentralized and behavior-based approach for large groups of robots moving in unknown environments while preserving connectivity and avoiding collisions.
  Validated the algorithm with simulations for teams of more than 50 robots

- State Abstraction of Multi-Robot System under Uncertainty
  Designed fully distributed asynchronous algorithms for information leader selection to abstract high dimensional state information under state uncertainty using optimization techniques
- Human Action Prediction with Recurrent Neural Network
  Developed a model based on Recurrent Neural Network to predict human actions in complex Cyber-Physical Systems, and explored output uncertainty within neural network model

PUBLICATION

[1] **A. Li**, L. Wang, P. Pierpaoli, and M. Egerstedt, "Formally Correct Composition of Coordinated Behaviors Using Control Barrier Certificates" *In Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS2018) (Submitted), 2017*

[2] **A. Li**, W. Luo, S. Nagavalli, and K. Sycara, "Decentralized Coordinated Motion for a Large Team of Robots Preserving Connectivity and Avoiding Collisions" *In Proceedings of the IEEE Conference on Robotics and Automation (ICRA2017), 2017*

[3] **A. Li**, W. Luo, S. Nagavalli, N. Chakraborty and K. Sycara, "Handling State Uncertainty in Distributed Information Leader Selection for Robotics Swarms" *In Proceedings of the IEEE Conference on System, Man and Cybernetics (SMC2016), 2016*

[4] **A. Li**, M. Lewis, C. Lebiere, K. Sycara, S. S. Khatib, Y. Tang, M. Siedsma and D. Morrison, "A Computational Model Based on Human Performance for Fluid Management in Critical Care" *In Proceedings of the IEEE Symposium Series on Computational Intelligence (SSCI2016), 2016*

TEACHING EXPERIENCE

Georgia Institute of Technology January 2018 - May 2018
Graduate Teaching Assistant *Atlanta, GA*
– CS 3630 - Introduction to Robotics and Perception (undergraduate level) Spring 2018

SKILLS

Programming Laguages MATLAB, Python, C/C++, Java, R
Open Sourse Libraries Tensorflow, CNTK, Keras, ROS, OpenCV, OpenGL, PCL

HONORS

– Siebel Scholar Class of 2017 (only 92 selected worldwide) 2016
– Outstanding Graduate (top 5%) 2015
– The Chu Kochen Scholarship (top 12 among 20,000+ undergraduates in ZJU) 2014
– National Scholarship (top 1%) 2013
– First-Class Scholarship for Outstanding Students (top 3%) 2013, 2014
– Excellent Student Awards 2012, 2013, 2014