Qin Yang, Ph.D.
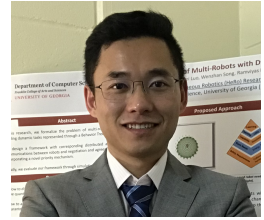
✉ RickYang2014@gmail.com   qy03103@uga.edu
🏠 https://rickyang2016.github.io/
⌂ https://github.com/RickYang2016
🎓 https://scholar.google.com/citations?user=t6e_A9kAAAAJ&hl=en

Education Background

01/2019 – 05/2022
Ph.D., University of Georgia in Computer Science
Specializing in: *Distributed Artificial Intelligence (DAI), Swarm Intelligence, Multi-Agent/Robot Systems (MAS), Robotics, and Human-Robot Interaction*
Thesis title: *Self-Adaptive Swarm System (SASS)*
Dissertation:https://scholar.google.com/citations?view_op=view_citation&hl=en&user=t6e_A9kAAAAJ&citation_for_view=t6e_A9kAAAAJ:3fE2CSJIrl8C

08/2017 – 12/2018
M.Sc. Colorado School of Mines in Computer Science.
Speciality: *Multi-Agent Systems (MAS) and Multi-Robot Systems (MRS).*

09/2008 – 07/2011
M.Eng. Peking University in Software Engineering.

09/2000 – 07/2004
B.Eng. Harbin Institute of Technology in Mechatronics.

Academic Positions and Working Experiences

10/2022 – Present
Research Scientist in Automated Driving Systems, Automotive Products Research Laboratory, Hitachi America, Ltd.

01/2019 – 09/2022
Research & Teaching Assistant/Instructor, Computer Science Department, University of Georgia.

08/2017 – 12/2018
Teaching Assistant, Computer Science Department, Colorado School of Mines.

06/2017 – 08/2017
Assistant Research Engineer, Robotics and Artificial Intelligence Laboratory, The Chinese University of Hong Kong - Shenzhen.

05/2014 – 05/2017
Senior Engineer & Project Manager, Intelligent Engineering Department, China Architecture Design & Research Group.

06/2010 – 04/2014
Electrical Engineer & Project Manager, China Electronics Engineering Design Institute.

07/2004 – 05/2010
Electrical Engineer & Project Manager, China Aerospace Science and Industry Corporation.

Research Publications

Conference Proceedings

1. **Yang**, **Q.**, & Parasuraman, R. (2022a). A game-theoretic utility network for cooperative multi-agent decisions in adversarial environments. In *Iros22 workshop on decision making in multi-agent systems*. IEEE.

2. **Yang**, **Q.**, & Parasuraman, R. (2022d). Game-theoretic utility tree for multi-robot cooperative pursuit strategy. In *2022 the 54th international symposium on robotics (isr europe)*. IEEE.

3. **Yang**, **Q.** (2021). Self-adaptive swarm system (sass). In *Proceedings of the thirtieth international joint conference on artificial intelligence, IJCAI-21* (pp. 5040–5041). Doctoral Consortium.

4. **Yang**, **Q.**, & Parasuraman, R. (2021). How can robots trust each other for better cooperation? a relative needs entropy based robot-robot trust assessment model. In *2021 ieee international conference on systems, man, and cybernetics (smc)*. IEEE.

5. **Yang**, **Q.**, & Parasuraman, R. (2020a). Hierarchical needs based self-adaptive framework for cooperative multi-robot system. In *2020 ieee international conference on systems, man, and cybernetics (smc)* (pp. 2991–2998). IEEE.

6. **Yang**, **Q.**, & Parasuraman, R. (2020b). Needs-driven heterogeneous multi-robot cooperation in rescue missions. In *2020 ieee international symposium on safety, security, and rescue robotics (ssrr)* (pp. 252–259). IEEE.

7. **Yang**, **Q.**, Luo, Z., Song, W., & Parasuraman, R. (2019). Self-reactive planning of multi-robots with dynamic task assignments. In *2019 international symposium on multi-robot and multi-agent systems (mrs)* (pp. 89–91). IEEE.

Submitted Papers

1. **Yang**, **Q.**, & Parasuraman, R. (2022b). A hierarchical game-theoretic decision- making for cooperative multi-agent systems under the presence of adversarial agents.

2. **Yang**, **Q.**, & Parasuraman, R. (2022c). Bayesian strategy network based soft actor critic in deep reinforcement learning.

Peer Review Service

Reviewer for the follows:

Journal   🔖 IEEE Robotics and Automation Letters (**RA-L**)

Conference   🔖 The 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems (**IROS 2020**)

🔖 The 3rd IEEE International Symposium on Multi-Robot and Multi-Agent Systems (**MRS 2021**)

🔖 The 2021/2022 IEEE International Conference on Systems, Man, and Cybernetics (**SMC 2021/2022**)

🔖 The 2023 IEEE International Conference on Robotics and Automation (ICRA) (**ICRA 2023**)

Skills

Languages	⚑	Strong reading, writing and speaking competencies for English and Mandarin Chinese.
Coding	⚑	Python, C#, c++, C, sql, xml/xsl, MatLab, ros, LaTeX.
Misc.	⚑	Academic research, Teaching, Hiking, Traveling, Reading, Cooking, Watching Movies, Classic & Jazz Lover, Exploring, Thinking and Dreaming.

Miscellaneous Experience

Certification

2015	⚑	**Certified Senior Engineer** in Electric Automatic Control System. Awarded by China Architecture Design Institute.
2009	⚑	**Certified Engineer**. Awarded by China Aerospace Architectural Design Research Institute.