Sicong Jiang

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Education

Georgia Institute of Technology Aug. 2019 – May. 2021
MS Electrical and Computer Engineering, GPA 3.6/4 *Atlanta, GA*

Northeastern University Sep. 2015 – May. 2019
BS Engineering in Automation, GPA 89.3/100, Top 3% *Shyenyang, China*

Research Experience

Intellient Vision and Automation Lab, Georgia Tech Aug. 2019 – Present
Navigation Group Member *Atlanta, GA*

- Applied a Markov Decision Processes(MDP) model to multi-agent exploration.Improved its reward function to achieve better exploration efficiency.
- Improved and applied DDPG/MADDPG-based algorithms to multi-agent formation control,navigation and obstacle avoidance.

The State Key Laboratory of Automation for Process Industries May. 2018 – Jul. 2018
Undergraduate Research Assistant *Shenyang, China*

- Combined auto encoder algorithm and the stochastic neural network to predict the quality index of hot-rolled steel.
- Negotiated data collection with company collaborators (China Baowu Steel Group).

Robotics Automation and Vision Laboratory, Northeastern University Apr. 2017 – May. 2018
Research Assistant *Shenyang, China*

- Developed a long-term tracking algorithm by using the filtered deep features and designed the re-detection mechanism to solve the drift problem in visual tracking.
- Combined the kernel correlation filter with YOLO/SSD to get better tracking performance.
- Applied the tracking algorithm on turtlebots and designed experiments to test their performance in the real environment.

Publications

- Zhang J, **Jiang S**, Zhang Y, et al. Long-term tracking algorithm using deep features and a single shot multibox detector[J]. Journal of Electronic Imaging, 2018, 27(5): 053019.
- **Jiang S**, Zhang J, Zhang Y, et al. Long-term tracking algorithm with the combination of multi-feature fusion and YOLO[C]//Chinese Conference on Image and Graphics Technologies. Springer, Singapore, 2018: 390-402.
- Bao J, Zhang Y, Zhang Y, Liu T, Zheng R, **Jiang S**. Long-term Tracking Based on Spatio-Temporal Context Model[C]//2018 IEEE International Conference on Information and Automation (ICIA). IEEE, 2018: 1611-1616.

Awards

2019 Outstanding Graduates of Northeastearn University (Top 3%)
2019 Most Influential Graduates in Northeastern University (Top 3%)
2017 National First Prize of China Undergraduate Mathematical Contest in Modeling (Top 1%)
2017 First Prize of Liaoning Province in China Undergraduate Mathematical Contest in Modeling (Top 5%)
2016 - 2019 First&Second-class Scholarship in Northeastearn University (4 times)

Skills

Techniques Control Theory, Statistical Machine Learning, Image Processing, Robotic Dynamics
Programming Language Python, JAVA, MATLAB
Libraries Frameworks ROS, Simulink, Scikit-Learn, OpenCV/AI, Tensorflow, Pytorch