JUN WANG

Education

2022-present PhD candidate in Electrical Engineering, Washington University in St. Louis, St Louis, MO.

Advisor: Prof. Yiannis Kantaros

2019–2021: MSE in Robotics, University of Pennsylvania, Philadelphia, PA.

Advisor: Prof. George J. Pappas and Hamed Hassani

2015–2019: **BS in Software Engineering**, *Sun Yat-Sen University*, Guangzhou, China.

2018: Exchange Program, Computer Engineering, Sungkyunkwan University, Seoul, Korea.

Publications

In Conference Proceedings

Jun Wang, Samarth Kalluraya, and Yiannis Kantaros. Verified compositions of neural network controllers for temporal logic control objectives. In *2022 IEEE Conference on Decision and Control (CDC)*.

Research Experience

Washington University in St Louis

2021-present Verification of Compositional Control Skills for Temporal Logic Properties.

 Designed verifiable compositions of NN controllers that yield system behaviors satisfying complex and long-term tasks captured by formal languages

GRASP Lab, University of Pennsylvania

2020-2021 Model Based Robust Semantic Segmentation.

- Investigated that most works have only focused on the robustness of image classification
- o Tackled challenges on the robustness of 2D semantic segmentation under natural variations
- o Implemented ResNet-based segmentation model with pyramid pooling as context information catcher
- o Implemented model-based robust training algorithms with the help of domain adaptation methods
- Achieved higher prediction accuracy on Cityscapes dataset than PSPNet

Professional Experience

- 2021-2022 Research Intern, Schlumberger Doll Research Center, Schlumberger.
 - Robotics & Sensor Physics Department
 - Advisor: Dr. Tianxiang Su
- Spring 2021 **Graduate Teaching Assistant**, University of Pennsylvania.
 - CIS 519: Applied Machine Learning
 - 2020-2021 **Graduate Course Grader**, University of Pennsylvania.
 - ESE 547: Legged Locomotion
 - ESE 512: Dynamical Systems
 - ESE 500: Linear Systems
 - 2018 Software Engineer Intern, Industrial and Commercial Bank of China.
 - 2017 Algorithm Engineer Intern, GuangDong Poya Information & Technology Co., LTD..

Awards

2016-2017 Scholarship for Academic Excellence, Sun Yat-sen University, Guangzhou, China.