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. Deeplogic: Verification of compositional 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.

- o 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
- $\verb| o Implemented ResNet-based segmentation model with pyramid pooling as context information catcher \\$
- 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.