Yijun Yuan

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Education

■ M.E., Computer Science and Technology, School of Informa-Sept. 2018 – Present tion Science and Technology, ShanghaiTech University, China.

Sept. 2014 – Jun. 2018 ■ B.E., Computer Science and Technology, School of Information Science and Technology, ShanghaiTech University, China.

Experience

Teaching

Spring 2018 **Teaching Assistant**, Computer Architecture I.

Research

Fall 2016 - Aug. 2017

■ Computer Vision (Retina image segmentation, Crowd Counting). Sept. 2017 - Aug. 2018

■ Mapping, Robotics(1. Automatic Generation of Hierarchical Area Topology Representations from 2D Grid Maps (Bachelor's Thesis), 2. Fast Gaussian Process Occupancy Mapping (Accepted to ICARCV2018), 3. Incrementally building topology graphs via distance maps (Submitted to ICRA2019), 4. Topological Area Graph Generation and its Application to Path Planning (Submitted to ICRA2019)).

May. 2018 - Oct. 2018 ■ Machine Learning (Deep Kernel Learning with Randomized Sketches(Waiting for submission)).

Oct. 2018 - Nov. 2018 **Machine Learning** (CBCT Calibration).

■ Robot Learning (RL/IL on Arms (Motion Planning and Learning Oct. 2018 - present Inverse Kinematic)).

Research Publications

- Jiawei, H., Yuan, Y. & Schwertfeger, S. (2018). Topological area graph generation and its application to path planning. arXiv preprint arXiv:1811.05113.
- Yuan, Y., Haofei, K. & Schwertfeger, S. (2018). Fast gaussian process occupancy maps. In The 15th international conference on control automation robotics & vision (icarcv).
- Yuan, Y. & Schwertfeger, S. (2018). Incrementally building topology graphs via distance maps. arXiv preprint arXiv:1811.01547.

Awards

- 2016 **Dean's Scholarship** ShanghaiTech University.
- 2017 **Excellent Scholarship**, ShanghaiTech University.
- 2018 **Fan's Favorite Prize, NO.4 in total score, Best on HPCG and Tensorflow,** ISC 2018 high performance competition, Frankfurt, Germany.

Skills

Professional skills Computer Vision, Robotics, Machine Learning, Deep Learning, Stochastic Processes

Programming \blacksquare PYTHON, C++, C, MATLAB, R

Software ROS, Gym

Simulator ■ Vrep, Unity3D.

Framework | Tensorflow, Pytorch

Language ☐ English (fluent), Chinese (native)