Yijun Yuan

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Education

Sept. 2018 – Present — **M.E., Computer Science and Technology, School of Information 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).

Oct. 2018 - present — **Robot Learning** (RL/IL on Arms (Motion Planning, Manipulation and Visual Servoing)).

Research Publications

1. Jiawei, H., Yuan, Y. & Schwertfeger, S. (2018). Topological area graph generation and its application to path planning. *arXiv preprint arXiv:1811.05113*.
2. Yuan, Y., Kuang, H. & Schwertfeger, S. (2018). Fast gaussian process occupancy maps. In *2018 15th international conference on control, automation, robotics and vision (icarcv)* (pp. 1502–1507). IEEE.
3. 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	PYTHON, C++, C, MATLAB, R
Software	ROS, Gym
Simulator	Vrep, Unity3D.
Framework	Tensorflow, Pytorch
Language	English (fluent), Chinese (native)