

Haofei Kuang

Automation and Robotics Center, ShanghaiTech University

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EDUCATION

ShanghaiTech University 2017 - Present
MS in Computer Science (Advisor: Prof. Sören Schwertfeger)

Hefei University of Technology 2013 - 2017
BSE in Computer Science and Technology

RESEARCH INTERESTS

Computer Vision and Robotics
Semantic Segmentation, Depth Estimation, Visual Odometry, 3D Reconstruction

TECHNOLOGY SKILLS

Programming Languages
C++, Python, MATLAB, Julia

Deep Learning Frameworks
PyTorch, MXNet

Others
OpenCV, ROS, Ceres, AWS

RESEARCH AND INDUSTRY EXPERIENCE

Intern 11/2019 - Present
Amazon AI Lab, Shanghai, China
Projects: GluonCV, Fast Semantic Segmentation, Monocular Depth Estimation

Visiting Student 06/2016 - 09/2016
Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
Projects: 3D Reconstruction with Binocular Endoscopic Images

PUBLICATIONS

Haofei Kuang, Qingwen Xu, Xiaoling Long and Sören Schwertfeger. “**Pose Estimation for Omni-directional Cameras using Sinusoid Fitting.**” *2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. IEEE, 2019.

Jaiwei Hou, Haofei Kuang, and Sören Schwertfeger. “**Fast 2D Map Matching Based on Area Graphs.**” *2019 IEEE International Conference on Robotics and Biomimetics (ROBIO)*. IEEE, 2019.

Haofei Kuang, Qingwen Xu, and Sören Schwertfeger. “**Depth Estimation on Underwater Omni-directional Images Using a Deep Neural Network.**” *Workshop on Underwater Robotics Perception, 2019 IEEE International Conference on Robotics and Automation (ICRA)*. IEEE, 2019.

Yuan, Yijun, Haofei Kuang, and Sören Schwertfeger. “**Fast Gaussian Process Occupancy Maps.**” *2018 15th International Conference on Control, Automation, Robotics and Vision (ICARCV)*. IEEE, 2018.

AWARDS

Best Paper <i>Workshop on Underwater Robotics Perception, 2019 ICRA</i>	2019
8/11 (rank/total) <i>Rescue Robot League of RoboCup 2019, Sydney, Australia.</i>	2019
Winner (5000\$) <i>Hackathon of 2018 IEEE ComSoc Summer School on Fog Computing.</i>	2018
Winner (3000RMB) <i>Autonomous Challenge of 2017 China ROS Summer School.</i>	2017
First-class Prize <i>The Scholarship of HeFei University of Technology.</i>	2016
8/16 (rank/total) <i>2D Soccer Simulation League of 2015 RoboCup.</i>	2015
First-class prize <i>2D Soccer Simulation League of 2015 RoboCup China Open.</i>	2015

SERVICE

Paper Reviewer
ICRA 2020, IRC 2020, Design Science

Teaching Assistant
Introduction to Robotics (2019)

Volunteer
SSRR 2017, ASSIST 2018

REFEREES

Prof. Sören Schwertfeger
Assistant Professor of ShanghaiTech University
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Homepage: <https://robotics.shanghaitech.edu.cn/people/soeren>

Prof. Laurent Kneip
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