

## Peiliang Li

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CONTACT INFORMATION	Clear Water Bay, Kowloon, Hong Kong <a href="https://peiliangli.github.io">https://peiliangli.github.io</a>	+852 5224 9248 pliap@connect.ust.hk
RESEARCH INTERESTS	3D Object Detection and Motion Tracking, Computer Vision, Machine Learning Visual-inertial State Estimation, UAV navigation, Augmented Reality	
EDUCATION	<b>Hong Kong University of Science and Technology</b> , Hong Kong, China Ph.D., Electronic & Computer Engineering, Sep 2016 - Jun 2020 ( <i>Expected</i> ) <ul style="list-style-type: none"><li>• Advisors: Prof. Shaojie Shen</li></ul> <b>University of Science and Technology of China</b> , Hefei, China B.S., Electronics Science and Technology, Sep 2012 - Jun 2016 <ul style="list-style-type: none"><li>• Thesis of Bachelor: Design and Implementation of Visual-Inertial Odometry</li><li>• Advisor: Prof. Bensheng Qiu, Wei Lu</li></ul>	
RESEARCH EXPERIENCE	<b>3D Object Detection and Motion Tracking</b> Exploring optimal ways of combining deep learning with 3D geometry to enable accurate and robust 3D object detection and motion estimation. Developing general 3D detection frameworks using adaptive sensor inputs (monocular, stereo, LiDAR, and multi-sensor fusion).	Apr 2017 - Present
	<b>Visual-inertial State Estimation (VINS)</b> Fusing the monocular camera, IMU, and loop information in a tightly-coupled manner, VINS achieves accurate and low drift 6-DoF state estimation, which boosts multiple applications (UAV navigation, Augmented Reality).	Sep 2016 - Jul 2017
PUBLICATIONS & PREPRINT	<ol style="list-style-type: none"><li>1. <b>Peiliang Li</b>, Xiaozhi Chen, Shaojie Shen. "Stereo R-CNN based 3D Object Detection for Autonomous Driving." <i>In IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i>, Long Beach, California, Jun, 2019.</li><li>2. <b>Peiliang Li</b>, Tong Qin, Shaojie Shen. "Stereo Vision-based Semantic 3D Object and Ego-motion Tracking for Autonomous Driving." <i>In Proc. of the European Conference on Computer Vision (ECCV)</i>, Munich, Germany, Sep, 2018.</li><li>3. Tong Qin, <b>Peiliang Li</b>, Shaojie Shen. "VINS-Mono: a Robust and Versatile Monocular Visual-Inertial State Estimator." <i>IEEE Transactions on Robotics (TRO 2018)</i>.</li><li>4. Tong Qin, <b>Peiliang Li</b>, Shaojie Shen. "Relocalization, global optimization and map merging for monocular visual-inertial SLAM." <i>In Proc. of the IEEE International Conference on Robotics and Automation (ICRA)</i>, Brisbane, Australia, May 2018.</li><li>5. <b>Peiliang Li</b>, Tong Qin, Botao Hu, Fengyuan Zhu, Shaojie Shen. "Monocular Visual-inertial State Estimation for Mobile Augmented Reality." <i>In Proc. of the IEEE International Symposium on Mixed and Augmented Reality (ISMAR)</i>, Nantes, France, Oct 2017.</li></ol>	

TEACHING & INTERNSHIP	<b>Teaching Assistant</b>	Mar 2017 - Jun 2017 & Mar 2018 - Jun 2018
	Hong Kong University of Science and Technology, ELEC 1110: Introduction to Electronic Robot Design	
	<b>Teaching Assistant</b>	Sep 2017 - Dec 2017
	Hong Kong University of Science and Technology, ELEC 5660: Introduction to Aerial Robotics	
	<b>Algorithm Intern</b>	Jul 2015 to Aug 2016
	DJI Ltd, Shenzhen	
	Moving object estimation and following, GPS-IMU fusion on mobile phone	
PUBLIC SOFTWARE	VINS-Mono: <a href="https://github.com/HKUST-Aerial-Robotics/VINS-Mono">https://github.com/HKUST-Aerial-Robotics/VINS-Mono</a> (1100+ Stars)	
	VINS-Mobile: <a href="https://github.com/HKUST-Aerial-Robotics/VINS-Mobile">https://github.com/HKUST-Aerial-Robotics/VINS-Mobile</a> (700+ Stars)	
AWARDS	Travel Awards	
	• ECCV conference, Munich, Germany.	Sep 2018
	• ISMAR conference, Nantes, France.	Oct 2017
	Student Awards — University of Science and Technology of China	
	• The Best Creative Award for DJI Developer Challenge	Feb 2015
	• The first Prize for USTC Electric Design Game	Oct 2014
	• "Guosheng Sun" Leadership Scholarship	Sep 2014
	• "Li Liu" Leadership Scholarship	Sep 2013
	• The Runner-Up for USTC RoboGame	Oct 2013