

JIA XU MA

MASTER, COMPUTER SCIENCE

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EDUCATION	Shanghai Jiao Tong University <i>Master of Engineering, Computer Science</i> Interests: Computer Vision and Artificial Intelligence	Sept. 2016 - 2019 (expected) GPA: 3.88/4.0 Advisors: Prof. Cewu Lu
	Nanjing University <i>Bachelor of Science, Physics</i>	Sept. 2012 - Jun. 2016 GPA: 4.5/5.0
WORKING EXPERIENCES	Flexiv Robotics, Ltd. - Implemented the 2017 CVPR paper Polygon-RNN in pytorch code 🔗 - Constructed a label system with auto assistance - Designed mainly for labeling image segmentation ground truths	Intern, May. 2018 - Now
PUBLICATION	Fast Surface Defect Detection Using Gabor Filters Jiaxu Ma , Yuxi Wang, Chen Shi, Cewu Lu <i>International Conference on Image Processing (ICIP)</i> 2018. Annotation-Free and One-Shot Learning for Instance Segmentation of Homogeneous Object Clusters Zheng Wu, Ruiheng Chang, Jiaxu Ma , Cewu Lu, Chi-Keung Tang <i>International Joint Conferences on Artificial Intelligence (IJCAI)</i> 2018.	
EXPERIENCES	Defect detection on surfaces of industrial products - Improved Gabor filters and some morphological image processing skills - Designed a defect detection system composed of Gabor filtering, hysteresis thresholding, region grouping and noise removal - Achieved nearly real-time performance for realistic scratch detection and crack detection Instance Segmentation of Homogeneous Object Clusters - Synthesized clustering images based on the optimization objectives - Trained a deep learning segmentation model for synthesized images Accurate parts localization - Implemented the well-known Structured Edge Detection Toolbox in c++ code 🔗 - Constructed a parts localization system based on object detection(EdgeBoxes), object classification(AlexNet), image matching(SiftFlow) and object tracking(KCF) methods	Aug. 2017 - Feb. 2018 Jan. 2017 - Dec. 2017 Nov. 2016 - Apr. 2017
HONORS AND AWARDS	Graduate Student Scholarship, Grand Prize (Top 30%) Honorable Winner of The Mathematical Contest in Modeling (Top 25%) Industrial Bank Scholarship (Top 5%)	2016, 2017 2014 2013
PROGRAMMING AND PROFICIENCIES	C / C++, Python, MATLAB, \LaTeX OpenCV, TensorFlow, PyTorch, Torch	