

# JIA XU MA

MASTER, COMPUTER SCIENCE

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EDUCATION	<b>Shanghai Jiao Tong University</b> <i>Master of Engineering, Computer Science</i> Interests: <b>Computer Vision and Artificial Intelligence</b>	Sept. 2016 - 2019 (expected) <b>GPA: 3.88/4.0</b> Advisors: Prof. <a href="#">Cewu Lu</a>
	<b>Nanjing University</b> <i>Bachelor of Science, Physics</i>	Sept. 2012 - Jun. 2016 <b>GPA: 4.5/5.0</b>
UNDER REVIEW	<b>Fast Surface Defect Detection Using Gabor Filters</b> <b>Jiaxu Ma</b> , Yuxi Wang, Chen Shi, Cewu Lu Submitted to the <i>International Conference on Image Processing (ICIP)</i> 2018.	
	<b>Annotation-Free and One-Shot Learning for Instance Segmentation of Homogeneous Object Clusters</b> Zheng Wu, Ruiheng Chang, <b>Jiaxu Ma</b> , Cewu Lu, Chi-Keung Tang Submitted to the <i>International Joint Conferences on Artificial Intelligence (IJCAI)</i> 2018.	
EXPERIENCES	<b>Defect detection on surfaces of industrial products</b> - 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	Aug. 2017 - Feb. 2018
	<b>Instance Segmentation of Homogeneous Object Clusters</b> - Synthesized clustering images based on the optimization objectives - Trained a deep learning segmentation model for synthesized images	Jan. 2017 - Dec. 2017
	<b>Accurate parts localization</b> - Implemented the well-known Structured Edge Detection Toolbox in c++ code <a href="#">🔗</a> - Constructed a parts localization system based on object detection(EdgeBoxes), object classification(AlexNet), image matching(SiftFlow) and object tracking(KCF) methods	Nov. 2016 - Apr. 2017
	<b>Predictions on the fluctuation in the stock market</b> - Compared several basic models in machine learning, like SVR(Support Vector Regression), NN(Neural Network), HMM(Hidden Markov model), on the stock market data - Predicted the fluctuation in the stock market using SVR	Nov. 2015 - Mar. 2016
HONORS AND AWARDS	Graduate Student Scholarship, Grand Prize ( <b>Top 30%</b> ) Honorable Winner of The Mathematical Contest in Modeling ( <b>Top 25%</b> ) Industrial Bank Scholarship ( <b>Top 5%</b> ) Elite Scholarship ( <b>Top 15%</b> )	2016, 2017 2014 2013 2013, 2015
PROGRAMMING PROFICIENCIES	C / C++, Python, MATLAB, $\text{\LaTeX}$ OpenCV, TensorFlow, PyTorch, Torch	