

Junru Wu

CONTACT INFORMATION	Room A-306, SIST Building 1, 393 Middle Huaxia Road Pudong District, Shanghai, 201210, China	+ (86)18512100019 wujr1@shanghaitech.edu.cn
RESEARCH INTERESTS	Computer Vision, Machine Learning, Saliency Detection	
EDUCATION	Tongji University , Shanghai, China B.Eng., Electronics and Information Engineering <ul style="list-style-type: none">• Thesis: <i>Pedestrian Detection with Machine Learning</i>• Advisor: Prof. Shangzhi Xu• GPA: 83.74/100• Core Course: Fundamentals of Computers, C/C++ Programming, Software Technology, Computer Networks, Digital Electronic Technology, Embedded Systems	Sept. 2012 - July 2016
PUBLICATIONS	Yanyu Xu, Nianyi Li, Junru Wu , Jingyi Yu, and Shenghua Gao. "Beyond Universal Saliency: Personalized Saliency Prediction with Multi-branch CNN" submitted to <i>IEEE Conference on Computer Vision and Pattern Recognition (CVPR)</i> , 2017.	
RESEARCH EXPERIENCE	Research Assistant , Visual Computing Lab, ShanghaiTech Univeristy <ul style="list-style-type: none">• Personalized Saliency Prediction with Multi-branch CNN<ul style="list-style-type: none">- First to investigate the heterogeneous gaze patterns of individuals when viewing an identical scene.- Produced the first database of personalized saliency maps (PSMs).- Adopted a novel Multi-branch Convolutional Neural Network (CNN) to model personalized saliency map (PSM). Advisor: <i>Prof. Shenghua Gao, Prof. Jingyi Yu</i>	Aug. 2016 - Now
	Undergraduate Research Assistant , Tongji Univeristy <ul style="list-style-type: none">• Pedestrian Detection with Machine Learning<ul style="list-style-type: none">- Combined pyramid histogram of oriented gradient (PHOG) features and support vector machine (SVM) with the histogram intersection kernel (HIK) to boost the effectiveness and efficiency of pedestrian detector.- Performed comprehensive experiments on INRIA Pedestrian Dataset and compared performance with state-of-the-art methods. Advisor: <i>Prof. Shangzhi Xu</i>	Jan. 2016 - July 2016
	Student Innovation Training Program , Tongji Univeristy <ul style="list-style-type: none">• Crowd tracking system on aerial platforms<ul style="list-style-type: none">- Developed a automate surveillance system that detect and track crowds based on video feeds captured by drones.- Employed background subtraction algorithm based on Gaussian mixture models to detect moving crowds.- Used Kalman filter with Expectation-maximization (EM) algorithm to track the crowds. Advisor: <i>Prof. Yuchuan Du</i>	June 2015 - June 2016
PROFESSIONAL EXPERIENCE	System Engineering Intern , Delphi Technical R&D Center <ul style="list-style-type: none">• Used Altium Designer software to design PCB Layout for the Intergrated test bench of Body Control Module (BCM).• Validated the functionality and reliability of test bench in simluation software. Supervisor: <i>Zhigang Yao, Engineering Group Manager</i>	July 2015 - Sept. 2015

AWARDS	• Student Innovation Training Program, First Prize, Tongji University	June 2016
	• Mathematical Contest in Modeling (MCM), Honorable Mention	Feb. 2016
	• China Undergraduate Mathematical Contest in Modeling (CUMCM), Third-class Prize	Sept. 2015
	• Semester Scholarship, TU Darmstadt (DAAD)	Dec. 2014
	• Academic Record Scholarship, Tongji University	Sept. 2013
SKILLS	Programming languages	
	• C, C++, Python, MATLAB, Shell script	
	Programming Tools	
	• Caffe, Matconvnet, OpenCV, L ^A T _E X	
	EDA Tools	
	• Altium Designer, Protel, Multisim	
EXCURRICULAR ACTIVITIES	Languages	
	• Chinese: Native	
	• English: Fluent	
	• German: Intermediate	
	Exchange Student , Technische Universitaet Darmstadt, Germany Oct. 2014 - Feb. 2015	
	• Team leader of the exchange students from Tongji, coordinated collective activity with Intercultural Team of Tutors (ITT).	
REFERENCES	• Attended Intensive Language Courses and Cultural Course at TU Darmstadt.	
	Student Member , Tongji University Students' Union Sept. 2013 - Jan. 2015	
	• Assisted in planning events includes "Top ten school singers" attracting over 500 guests.	
	• Assisted in running official accounts and web page for the Students' Union.	
	Student Volunteer , Xuhui Museum of Art, Shanghai Sept. 2013 - July. 2014	
	• Assisted in holding special events and the management of the museum.	
REFERENCES	Shenghua Gao	
	Assistant Professor	Phone: +(86)185-2105-2610
	School of Information Science and Technology	
	ShanghaiTech Univeristy	E-mail: gaoshh@shanghaitech.edu.cn
	Shangzhi Xu	
	Assistant Professor	Phone: +(86)181-4979-0296
	College of Electronic and Information Engineering	
	Tongji University	E-mail: xushangzhi@tongji.edu.cn