

# 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	
EDUCATION	<b>Tongji University, Shanghai, China</b> <i>B.Eng. in Electronics and Information Engineering</i> <ul style="list-style-type: none"><li>Thesis: Pedestrian Detection with Machine Learning <i>Advisor: Prof. Shangzhi Xu</i></li><li>GPA: 83.74/100</li><li>Core Course: Fundamentals of Computers, C/C++ Programming, Digital Signal Processing, Software Technology, Computer Networks, Digital Electronic Technology, Embedded Systems</li></ul>	<i>Sept. 2012 - July 2016</i>
PUBLICATIONS	Yanyu Xu, Nianyi Li, <b>Junru Wu</b> , 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	<b>ShanghaiTech Univeristy, Shanghai, China</b> <i>Visual Computing Lab (Director: Prof. Yi Ma)</i> <i>Research Assistant</i> <ul style="list-style-type: none"><li><b>Personalized Saliency Prediction with Multi-branch CNN</b><ul style="list-style-type: none"><li>-Investigate the heterogeneous gaze patterns of individuals when viewing an identical scene based on eye-tracker collected data</li><li>-Adopted a Multi-branch Convolutional Neural Network to model the proposed personalized saliency maps. [submitted to CVPR 2017] <i>Advisor: Prof. Shenghua Gao</i></li></ul></li></ul>	<i>Aug. 2016 - Present</i>
	<b>Tongji University, Shanghai, China</b> <i>Undergraduate Research Assistant</i> <ul style="list-style-type: none"><li><b>Pedestrian Detection with Machine Learning</b><ul style="list-style-type: none"><li>-Built an pedestrian detector with Pyramid HOG features and Intersection Kernel Support Vector Machine.</li><li>-Performed comprehensive experiments on INRIA Pedestrian Dataset and compare model performance against state-of-the-art methods. <i>Advisor: Prof. Shangzhi Xu</i></li></ul></li></ul>	<i>Jan. 2016 - July 2016</i>
PROJECT EXPERIENCE	<i>Student Innovation Training Program, Tongji Univeristy</i> <ul style="list-style-type: none"><li><b>Crowd tracking in Aerial Video</b><ul style="list-style-type: none"><li>-Implemented a automate surveillance system to detect and track pedestrians in aerial video captured by UAVs.</li><li>-Employed background subtraction based on Gaussian mixture models to detect moving pedestrians and used Kalman filter to track them. <i>Advisor: Prof. Yuchuan Du</i></li></ul></li></ul>	<i>June 2015 - June 2016</i>
	<i>Course Projects, Tongji Univeristy</i> <ul style="list-style-type: none"><li><b>Implementation of an OFDM systems using GNU Radio</b> - Built an OFDM based communication systems based on the GNU Radio Software platform. <i>Summer 2015</i></li><li><b>Evaluations and Comparisons on Edge Detection Methods</b> - Performed quantitative comparisons across common Edge Detection Methods such as Canny, Sobel, Laplacian, Prewitt, Roberts and Differential. <i>Summer 2015</i></li><li><b>An Analog Signal Generator</b> - Built a Analog Signal Generator based on a Sine-wave Oscillator to generate sinusoidal wave. <i>Summer 2014</i></li></ul>	
PROFESSIONAL EXPERIENCE	<b>Delphi Technical R&amp;D Center, Shanghai, China</b> <i>System Engineering Intern</i> <ul style="list-style-type: none"><li>Used Altium Designer software to design PCB Layout for the Intergrated test bench of Body Control Module (BCM). <i>Supervisor: Zhigang Yao, Engineering Group Manager</i></li></ul>	<i>July 2015 - Sept. 2015</i>

AWARDS	• Mathematical Contest in Modeling (MCM), Honorable Mention	<i>Spring 2016</i>
	• China Undergraduate Mathematical Contest in Modeling (CUMCM), Third-class Prize	<i>Fall 2015</i>
	• Student Innovation Training Program, First Prize, Tongji University	<i>Summer 2016</i>
	• Semester Scholarship, TU Darmstadt (DAAD)	<i>Fall 2014</i>
	• Academic Record Scholarship, Tongji University	<i>Fall 2013</i>
SKILLS	Programming languages	
	• C, C++, Python, MATLAB, Shell script	
	Programming Tools	
	• Caffe, Tensorflow, OpenCV, L <sup>A</sup> T <sub>E</sub> X	
	EDA Tools	
EXCURRICULAR ACTIVITIES	• Altium Designer, Protel, Multisim	
	Languages	
	• Chinese: Native	
	• English: Fluent	
	• German: Intermediate	
	<b>Technische Universitaet Darmstadt, Darmstadt, Germany</b>	<i>Oct. 2014 - Feb. 2015</i>
	<i>Exchange Student</i>	
	• Served as the team leader of the exchange students from Tongji University, coordinated collective activity with Intercultural Team of Tutors (ITT).	
	• Attended Intensive Language Courses and Cultural Course at TU Darmstadt.	
	<b>Tongji University Students' Union</b>	<i>Sept. 2013 - Jan. 2015</i>
	<i>Student Member</i>	
	• 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.	
	<b>Xuhui Museum of Art, Shanghai, China</b>	<i>Sept. 2013 - July. 2014</i>
	<i>Student Volunteer</i>	
REFERENCES	<b>Shenghua Gao</b>	
	Assistant Professor	Phone: +(86)185-2105-2610
	School of Information Science and Technology	
	ShanghaiTech Univeristy	E-mail: gaoshh@shanghaitech.edu.cn
	<b>Shangzhi Xu</b>	
	Assistant Professor	Phone: +(86)181-4979-0296
	College of Electronic and Information Engineering	
	Tongji University	E-mail: xushangzhi@tongji.edu.cn