

# Junru Wu

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CONTACT INFORMATION	988 Zhaojiabang Road, Building A, Unit 1101 Shanghai, 200030	+(86)18512100019 wujr1@shanghaitech.edu.cn
RESEARCH INTERESTS	Computer Vision, Machine Learning	
EDUCATION	<b>Tongji University</b> , Shanghai, China B.Eng., Electronics and Information Engineering <ul style="list-style-type: none"><li>• Thesis: <i>Pedestrian Detection with Machine Learning</i></li><li>• Advisor: Prof. Shangzhi Xu</li><li>• GPA: 83.74/100</li><li>• Core Course: Fundamentals of Computers, C/C++ Programming, Software Technology, Computer Networks, Digital Electronic Technology, Embedded Systems</li></ul>	<b>Sept. 2012 - July 2016</b>
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), 2017</i> . ( <a href="#">pdf</a> )	
RESEARCH EXPERIENCE	<b>Research Assistant</b> , Visual Computing Lab, ShanghaiTech Univeristy <ul style="list-style-type: none"><li>• <b>Personalized Saliency Prediction with Multi-branch CNN</b><ul style="list-style-type: none"><li>- First to investigate the heterogeneous gaze patterns of individuals when viewing an identical scene.</li><li>- Produced the first database of personalized saliency maps (PSMs).</li><li>- Adopted a novel Multi-branch Convolutional Neural Network (CNN) to model personalized saliency map (PSM).</li></ul></li></ul> Advisor: <i>Prof. Shenghua Gao, Prof. Jingyi Yu</i>	<b>Aug. 2016 - Now</b>
	<b>Undergraduate Research Assistant</b> , Tongji Univeristy <ul style="list-style-type: none"><li>• <b>Pedestrian Detection with Machine Learning</b><ul style="list-style-type: none"><li>- 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.</li><li>- Performed comprehensive experiments on INRIA Pedestrian Dataset and compared performance with state-of-the-art methods.</li></ul></li></ul> Advisor: <i>Prof. Shangzhi Xu</i>	<b>Jan. 2016 - July 2016</b>
	<b>Student Innovation Training Program</b> , Tongji Univeristy <ul style="list-style-type: none"><li>• <b>Crowd tracking system on aerial platforms</b><ul style="list-style-type: none"><li>- Developed a automate surveillance system that detect and track crowds based on video feeds captured by drones.</li><li>- Employed background subtraction algorithm based on Gaussian mixture models to detect moving crowds.</li><li>- Used Kalman filter with Expectation-maximization (EM) algorithm to track the crowds.</li></ul></li></ul> Advisor: <i>Prof. Yuchuan Du</i>	<b>June 2015 - June 2016</b>
PROFESSIONAL EXPERIENCE	<b>System Engineering Intern</b> , Delphi Technical R&D Center <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).</li><li>• Validated the functionality and reliability of test bench in simluation software.</li></ul> Supervisor: <i>Zhigang Yao, Engineering Group Manager</i>	<b>July 2015 - Sept. 2015</b>

AWARDS	<ul style="list-style-type: none"> <li>• Student Innovation Training Program, First Prize, Tongji University</li> <li>• Mathematical Contest in Modeling (MCM), Honorable Mention</li> <li>• China Undergraduate Mathematical Contest in Modeling (CUMCM), Third-class Prize</li> <li>• Semester Scholarship, TU Darmstadt (DAAD)</li> <li>• Academic Record Scholarship, Tongji University</li> </ul>	<p>June 2016</p> <p>Feb. 2016</p> <p>Sept. 2015</p> <p>Dec. 2014</p> <p>Sept. 2013</p>
SKILLS	<p>Programming languages</p> <ul style="list-style-type: none"> <li>• C, C++, Python, MATLAB, Shell script</li> </ul> <p>Programming Tools</p> <ul style="list-style-type: none"> <li>• Caffe, Matconvnet, OpenCV, L<sup>A</sup>T<sub>E</sub>X</li> </ul> <p>EDA Tools</p> <ul style="list-style-type: none"> <li>• Altium Designer, Protel, Multisim</li> </ul> <p>Languages</p> <ul style="list-style-type: none"> <li>• Chinese: Native</li> <li>• English: Fluent</li> <li>• German: Intermediate</li> </ul>	
STANDARDIZED TEST	<ul style="list-style-type: none"> <li>• TOEFL 102</li> <li>• GRE V150 Q170 AW3.0</li> </ul>	
EXCURRICULAR ACVTIVITIES	<p><b>Exchange Student</b>, Technische Universitaet Darmstadt, Germany <b>Oct. 2014 - Feb. 2015</b></p> <ul style="list-style-type: none"> <li>• Team leader of the exchange students from Tongji, coordinated collective activity with Intercultural Team of Tutors (ITT).</li> <li>• Attended Intensive Language Courses and Cultural Course at TU Darmstadt.</li> </ul> <p><b>Student Member</b>, Tongji University Students' Union <b>Sept. 2013 - Jan. 2015</b></p> <ul style="list-style-type: none"> <li>• Assisted in planning events includes "Top ten school singers" attracting over 500 guests.</li> <li>• Assisted in running official accounts and web page for the Students' Union.</li> </ul>	
REFERENCES	<p><b>Shenghua Gao</b></p> <p>Assistant Professor</p> <p>School of Information Science and Technology</p> <p>ShanghaiTech Univeristy</p> <p><b>Shangzhi Xu</b></p> <p>Assistant Professor</p> <p>College of Electronic and Information Engineering</p> <p>Tongji University</p>	<p>Phone: +(86)185-2105-2610</p> <p>E-mail: gaoshh@shanghaitech.edu.cn</p> <p>Phone: +(86)181-4979-0296</p> <p>E-mail: xushangzhi@tongji.edu.cn</p>