Junru Wu

CONTACT Information 988 Zhaojiabang Road, Building A
, Unit 1101

+(86)18512100019

Information Shanghai, 200030

wujr1@shanghaitech.edu.cn

RESEARCH Interests

EDUCATION

Saliency Detection, Person Re-identification, Computer Vision and Machine Learning

Tongji University, Shanghai, China

Sept 2012 - July 2016

B.S., Electronics and Information Engineering

• GPA: 84/100

• Thesis: Pedestrian Detection with Machine Learning

• Advisor: Shangzhi Xu, Ph.D

PUBLICATIONS

Yanyu Xu, Nianyi Li, **Junru Wu**, Jingyi Yu, and Shenghua Gao. "Beyond Universal Saliency: Personalized Saliency Prediction with Multi-branch CNN" submitted to *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017.

RESEARCH EXPERIENCE Research Assistant, Shanghai Tech University

August 2016 - present

• Personalized Saliency Prediction with Multi-branch CNN

Investigate the heterogeneous gaze patterns of individuals when viewing an identical scene, produces the first database of personalized saliency maps (PSMs), propose to model PSM based on universal saliency map (USM) shared by different participants and adopt a novel deep learning based framework to estimate the discrepancy between PSM and USM.

Supervisor: Shenghua Gao, Ph.D & Jingyi Yu, Ph.D

Undergraduate Research Assistant, Tongji Univeristy

Jan 2016 - July 2016

• Pedestrian Detection with Machine Learning

Use pyramid histogram of oriented gradient (PHOG) as features, support vector machine (SVM) with the histogram intersection kernel (HIK) as a classifier to boost the effectiveness and efficiency of pedestrian detection. Performed comperhensive experiments on INRIA Pedestrian Dataset and compared performance with state-of-the-art methods.

Supervisors: Shangzhi Xu, Ph.D

Student Innovation Training Program, Tongji University June 2015 - June 2016

• Pedestrian tracking system on aerial platforms

Develop a automatic detection and tracking of pedestrians based on drone captured aerial footages, employ background subtraction algorithm based on Gaussian mixture models to detect moving pedestrians and Kalman filter to predict the location in each frame.

Supervisors: Yuchuan Du, Ph.D

Professional Experience System Engineering Intern, Delphi (China) Technical R&D Center July 2015 - Sept 2015

• Using Altium Designer software to design PCB for the Intergrated Testbench of Body Control Module (BCM) satisfying EMC requirements. Validate the functionality and reliability of Testbench in practical scenery

Supervisor: Zhigang Yao, Engineering Group Manager

AWARDS

• Student Innovation Training Program, Tongji University, First Prize

June 2016

• Mathematical Contest in Modeling (MCM), Honorable Mention

Feb 2016

• China Undergraduate Mathematical Contest in Modeling (CUMCM) Sept 2015 Third-class Prize

• Semester Scholarship, TU Darmstadt (DAAD)

Dec 2014

• Academic Record Scholarship, Tongji University

Sept 2013

SKILLS

Deep learning library

• Caffe

Mathematical and statistical programming

• Matlab

Programming languages

• C, C++, Python, Shell script

EDA Tools

• Altium Designer, Protel, Multisim

EXCURRICULAR ACVTIVITIES

Exchange Student, Technische Universitaet Darmstadt

Oct 2014 - Feb 2015

- Attend Language and Cultural Course at TU Darmstadt
- Leader of Tongji University's Group, coordinate group events with Intercultural Team of Tutors (ITT)

Student Member, Tongji University Students' Union Sept 2013 - Jan 2015

- Assist with planning of Students' Union's event includes "Top ten school singers"
- Running Official Accounts and Web page for Students' Union

References

Shenghua Gao

Assistant Professor Phone: +(86)185-2105-2610 School of Information Science and Technology E-mail: gaoshh@shanghaitech.edu.cn Shanghai
Tech University

Shangzhi Xu

Assistant Professor Phone: +(86)181-4979-0296

College of Electronic and Information Engineering

E-mail:

xushangzhi@tongji.edu.cn

Tongji University

Zhigang Yao

Systems Engineering Group Manager Electronics & Safety Division

E-mail: zhigang.yao@delphi.com

Phone: +(86)159-0166-8572

Delphi (China) Technical Research & Development Center Co., Ltd.