Shimeng Yu

Erik Jonsson School of Engineering & Computer Science

Computer Engineering

6822275441

sxy172730@utdallas.edu

EDUCATIONAL BACKGROUND

The University of Texas at Dallas   **Richardson, USA**

Major: Computer Engineering   Aug.2017-Present

Harbin Institute of Technology (HIT), M.E   **Harbin, China**

Major: Control Engineering   Jul. 2017

Research Interests: Computer Vision, Machine Learning

Overall GPA: 3.9/4; **Major GPA:** 3.9/4

Shenyang University of Technology (SUT), B.E   **Shenyang, China**

Major: Automation   Jul. 2014

Overall GPA: 3.4/4; **Major GPA:** 3.6/4

RESEARCH PROJECTS

Unconstrained Face Recognition   **Harbin, China**

Project leader   **Sept. 2016-Apr. 2017**

- A project aimed to achieve unconstrained face recognition in some extreme conditions such as large pose variations and varying expression.
- A Convolutional Neural Network was built based on Caffe.
- Realize a high computing efficiency with the ensurance of accuracy.

Identification System based on Real-time Face Recognition   **Harbin, China**

Research Assistant for Associate Prof. Zhenshen Qu   **May 2016-Jul. 2016**

- A real-time identity verification system built for intelligence access based on deep learning in order to realize face recognition with high accuracy.
- Created a new loss function in the process of feature learning to meet the robustness requirements.
- Built a Convolutional Neural Network based on Caffe.
- Used a novel median pooling method.

License Plate Recognition in Intelligent Transportation System   **Harbin, China**

Project leader   **Mar. 2016-May 2016**

- This project included vehicle detection and tracking as well as license plate segmentation and recognition.
- Used Gaussian blur algorithm to model the background and detect the running vehicle.
- Designed a novel CNN and implemented it in Caffe framework based on Python interface.
- Trained the CNN to learn features and used the well-trained CNN to recognize the license plate.

PUBLICATION

Z. Qu, **S. Yu** and M. Fu, "Motion background modeling based on context-encoder", 2016 Third International Conference on Artificial Intelligence and Pattern Recognition (AIPR), Lodz, Poland, 2016, pp. 1-5. DOI: 10.1109/ICAIPR.2016.7585207
- A background generating method for motion-based background of a video with dynamic foreground made by moving camera is proposed in this paper.

WORKING EXPERIENCE

Computer Vision Lab, Department of Control Science and Engineering, HIT   **Harbin, China**
Assistant for Associate Prof. Zhenshen Qu   **Mar. 2016-Jul. 2017**
- Took a responsibility of overseeing the projects progress and coordinating the programs of each member in the research team.
- Assisted A.P. Qu to arrange for the regular seminars and compiled reports after each seminars.

Counseling & Psychology Service Centre, HIT   **Harbin, China**
Assistant for Associate Prof. Ying Xu   **Sept. 2015-Jul. 2017**
- Assisted A.P. Xu to audit appointment applications and arrange psychological consultations.
- Optimized and maintained the online appointment system and the homepage of the Counseling & Psychology Service Centre.

HONORS & AWARDS

- Suzhou Industrial Park Scholarship Recipient   Oct. 2016
- The First Prize of Post-Graduate Students Scholarship Recipient   Sept. 2016
- The First Prize of Post-Graduate Students Scholarship Recipient   Sept. 2015
- Undergraduate Students Scholarship Recipient   Sept. 2013
- Undergraduate Students Scholarship Recipient   Sept. 2012

EXTRACURRICULAR ACTIVITIES

***Spring Bud House* Charity Tutorial Campaign**   **Harbin, China**
Volunteer   **Sept. 2015-Jul. 2016**
- Taught Mathematics and English for teenagers in the community as a nonprofit tutor on weekends.

***CAPE Meet-up 2014 Shenyang* event**   **Shenyang, China**
Organizer   **Feb.2014**
- Invited keynote speakers: the organizer of TEDxJLUHP, a cultural relic inspector in the local Cultural Relics Bureau and a famous local folk singer-songwriter.