# Chen Wang

# EDUCATION

•	Illinois Institute of Technology (IIT)
•	Master of Science in Computer Science, GPA: 3.67/4.00

Xi'an Jiaotong-liverpool University (XJTLU)

Bachelor of Digital Media Technology, Master of Multimedia Telecommunications

## Udacity

Deep Reinforcement Learning Nanodegree

# WORK EXPERIENCE

# • Algorithm developer intern - Nise AI company, Suzhou, China

- Developed monitoring algorithm for pedestrian flow depending on Mask-RCNN method by using Keras to help police monitor subway transportation.
- Developed work attendance system by pattern recognition to improve employee sign in efficiency.
- Developed python tool which could filter and mark image samples automatically by ResNet-101 in Keras framework. This tool helped our company reduced sample label makers form twelve to three.

# **PROJECT EXPERIENCE**

# • Research assistant - Wave Lab, IIT

Expected to finish at May 2019 • Developing a core understanding of critical capabilities and limitations of RL for inverse problems in science and engineering. Implement RL in a 2D system control problem, which leads to the data-driven embodiment of an optimal control scheme.

# • Research assistant - Pattern Recognition Lab, XJTLU

- Modified the matching function from global training to additional dynamic training of Siamese INstance search Tracker(SINT) in visual tracking. Increased car tracking accuracy from 66.68% to 69.47%
- Modified the Very Deep Convolutional Neural Network(VGG16) architecture by adding two performance in fer2013 (Public human facial expression database). Defeated Kaggle champions in 2013.
- Identified the vehicle license plate within various noises (Such as Gaussian noise, image deletion, and image dithering.) condition by using MATLAB.
- Facial Expression Recognition (Personal Project), XJTLU
  - Applied pattern recognition to implement human facial expression recognition. Used standard Japanese women face expression database (Jaffe). Combined Gabor filter and LBP as feature extraction, then using PCA to reduce features. Finally, classified features by LIBSVM.

#### PUBLICATION

• H. Jiang, K. Huang, T. Wu, R. Zhang, T.O. Ting, And C. Wang: Robust One-Shot Facial Expression Recognition with Sunglasses, International Journal of Machine Learning and Computing, vol.6, No.2, pp. 80-86, April2016.

#### COMPETITION

- [C++] Robot Development Competition
  - Developed and assembled the robot kits (Micro controller programming). Implemented various functions: The ambient light detection, Buzzer singing, Automatic tracing, Automatic avoid obstacles and Bluetooth control. Won the first prize of the Xi'an Jiaotong-liverpool University robot development competition.
- [Android SDK] Software Design Competition
  - Developed a smartphone application which enables multiple clients to make a group clock. Implemented overall Android application logic and wrote API server for community service. Won the third prize of the Xi'an Jiaotong-liverpool University software design competition.

#### PROGRAMMING SKILL

• Languages: Python, Java, C++, LATEX, Matlab, R

Chicago, IL Expected to Graduate at May 2020

> Suzhou, China Sep 2011 - Feb 2017

**Online** Course Dec 2018 - Mar 2019

Dec 2017 - Mar 2018

Jan 2016 - Nov 2017

Feb 2015 - Jun 2015

Oct 2014 - Dec 2014

Sep 2014 - Nov 2014