# XINGHAO ZOU

# **Education**

#### B. Eng. in Software Engineering

Sep. 2014 – Jul. 2018

Ranking: 3/77

University of Electronic Science and Technology of China (UESTC)

**GPA**: 3.88/4.00 or 87/100

2014-2015/2015-2016/2016-2017

People's scholarship

# **Internship**

### Software Engineering Intern, NVIDIA (Shanghai) Co. Ltd

**Sep. 2017 – now** 

- · Worked for Geforce, wrote Lua and Perl script to provide better performance to Nvidia' users
- Set up and maintained KVM Severs for the team. Guarantee the security problems (including backup/ restore, cipher-transmission)
- Utilized Hadoop joint with machine learning/deep learning method analyze the feedback from customers, respond appropriate solution
- · Develop docker to provide service (including Elastic Search, Tableau and so on) to monitor and analyze the data

## Software Engineering Intern, Neusoft(Chengdu) Co.

Jul. 2016 - Aug. 2016

- · Assisted in designing and implementing Android-based ticket booking system
- · Realized the function of querying database and collecting real-time ticket information required by users
- · Collaborated with UI and back-end engineers, got familiar with systems development life cycle

# Research

## Research Assistant, Audio Separated System, UESTC, Chengdu

Mar. 2017 – June. 2017

- Developed better audio separation system with higher STOI values by referring the previous researches "On training targets for supervised speech separation" (Wang, 2013)
- · Experimented with different settings, determined MRCG and Ideal Binary Masking as the architecture
- Investigated Clock-RNN on ICML'2014 and the speech-to-text technology in 2017 by IBM, wrote an 8-pages report about their overfitting problems, and helped my teammates build appropriate models
- · Continued working on this topic and composed a paper "Frame-level Speech Enhancement Based on Wasserstein Gan" ("International Conference on Acoustics, Speech and Signal Processing",2018, under review)

# **Projects**

#### Abnormal Events Detection System on CCTV, UESTC, Chengdu

Oct. 2016 - Jan. 2017

Part 1: detect the abnormal objects on the Pantograph-OCS system of train

• Utilized optical flow to discard the duplicity part in CCTV, and highlight the abnormal objects on the Pantograph-OCS system, and therefore decreased the maintenance costs of high speed trains

Part2: YOLO (You Only Look Once) for street scenario:

- Utilized the optimized YOLO to target all the objects in a scenario and compared them with the dictionary to detect the abnormal objects
- · Have developed a better understanding of the AI framework by utilizing the Darknet framework based YOLO

#### Unreal Engine 4-based 3D Game, UESTC, Chengdu

Feb. 2016 – June. 2016

- · Utilized UE 4 to design a standalone game
- · Architected the game level, designed game logic and some characters' AI
- Utilized the inset function to process unsupervised training with simulated cars, explored the possibility of selfdriven

### 3-people Group Leader, Android-based Biotic Feature Recognition System

Jan. 2015 – Apr. 2015

- · Used Independent Component Analysis algorithm to recognize biotic features like palms, faces and ears
- · Utilized Native Develop Kit on Android to run Open CV on Android platform.

# **Computer Skills & Qualifications**

- **Primary Languages:** C/C++, Java, Python, Lua, Perl, SQL
- · Tools/Framework/Platform: Git, JIRA, UE4, Linux, Tensorflow, Torch, Android, DirectX, MATLAB, docker
- Qualification: (Certified Tester) [Foundation Level] International Software Testing Qualification Board