# **Haochen Xie**

Tel: +86 15502919770 Email: hcxie20@126.com

Address: Xidian University, Xi'an, Shanxi, China

## **Objective**

Applying for M.S in Electronic Engineering

## **Educational Background**

Xidian University 09/2014-present

Dept. of Electronic Engineering

**Specialty**: Electronic and Information Engineering **GPA**: 3.37/4 (top 10%)

**Degree**: Bachelor of Engineering (Expected in 06/2018)

**TOEFL**: 96(R26 L28 S20 W22) **GRE**: 321(V154 Q167 W3)

## **Research Experience**

### Intelligent Home System Based on Artificial Neural Network

04/2015-07/2017

Advisor: Xinquan Lai (Xidian University)

National Collegiate Innovation and Entrepreneurship Competition

Aimed to design a user-oriented and self-adaptable intelligent home system, which consists of three parts: the sensor part, the central control system part and the power part. The central control system can control the movement of windows, based on the environment parameters analyzed from sensor data and calculated with the artificial neural network algorithm.

- > Searched the literatures, collected useful materials and papers as project manager
- ➤ Hardware: assembled sensors in host computer
- > Software: programed host computer, include the artificial neural network construction, debugging and training

Computer Network 03/2017-06/2017

Advisor: Prof. Jianlong Tang (Xidian University)

Aimed to design a kind of chat software similar to Twitter, based on python multi-threaded method, with a simple database and communication procedures.

- > Searched the literatures, collected materials and papers
- ➤ Learned UI interface produce and server-side database design by watching the teaching videos and do some research on official website
- > Summarized the project's progress and wrote the paper

#### Image Enhancement Technique of Digital Image

03/2017-05/2017

Advisor: Jimin Liang (Xidian University)

Optimizing the digital image quality by using the enhancement technique via two approaches: histogram processing and homomorphic filter.

- Researched useful materials about image enhance technique of digital image and the two related methods: histogram processing and homomorphic filter, browsed a large amount of literatures and papers
- Programed by MATLAB, analyzed results and selected the optimum method to process
- > Summarized the project's progress and wrote the report

## The Circuit Approach of Methane Alarm System

Advisor: Xin Liu (Xidian University)

Aimed to design a circuit which can detect the exist of methane leak and can achieve the function to give the alarm within a short time

- ➤ Chose the topic and designed the circuit
- ➤ Applied and implanted gas sensors, diodes and buzzers
- > Tested and debugged extensively to achieve the goal

### Mathematical Modeling

09/2015-12/2015

Advisor: Prof. Langping Shui (Xidian University)

Aimed to calculate the shortest route, starting from the Yongji Island, via the most of islands in Paracelsus Islands and returning to the same island eventually, using C++ language.

## Responsibility:

- ➤ Searched the literatures, collected useful materials and papers about the ant colony algorithm, genetic algorithm, etc.
- Found the optimum algorithm based on a great number of tests and analysis
- ➤ Programed by C++ language independently

## **Practice Experience**

### Xi'an iRain IOT Technology Service Co. Ltd

07/2017-present

- Assisted in designing the interface program and testing application program based on Web Services
- Learned Go language referring to the samples on Github website and programed independently

### Intern-lab Program in Sungkyunkwan University

02/2017-03/2017

- Learned Python independently by studying lots of API manuals
- > Learned the application and principle of Tensorflow

### Intern in Lab Electronic Equipment Structural Design Laboratory

07/2016-08/2016

Advisor: Prof. Baoyan Duan (Xidian University)

- Accomplished the signal process programming part by FPGA and modeling in CAD platform
- Took part in the presentation to show results

## **Social Work**

### Member of Model United Nations

Participated in many Model UN conference as Public Relation Minister, organized several outreach and sponsorship activities.

## **Summary of Qualifications**

**Electronic Engineering**: Grasped in a solid fundamental knowledge of electronic components, and the ability of gauging bonding integrated circuit

Digital and Simulation Technique: Proficient in C, C++, Python, MATLAB, Multisim

09/2016-12/2016