

# XIAO PENGFEI

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## EDUCATION

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- University of Electronic Science and Technology of China (UESTC)**, Chengdu, China 09/2013-06/2017  
**Glasgow College, UESTC (GCU)**  
**Watt Class Member**  
*Bachelor of Science in Electronic and Information Engineering*
- University of Glasgow (UoG)** (joint program with UESTC)  
**School of Engineering**  
*Bachelor of Engineering in Electrical and Electronic Engineering (Second Upper-Class Honor Degree)*
- GPA: 3.64/4.0; Rank: 24/122
- University of Melbourne**, Melbourne, Australia 02/2018-till now  
**School of Computing & Information Systems**  
*Master of Information Technology (Distributed Computing)*

## RESEARCH EXPERIENCES

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- University of Electronic Science and Technology of China**, Chengdu, China  
*Personalized Recommendation via Importance Ranking* 10/2016-05/2017
- Proposed and designed a recommendation algorithm by rating importance of users or items; used the rating results as one of the inputs of the collaboration filtering framework to improve accuracy and efficiency of recommendation
  - Produced a 5% improvement in accuracy compared with traditional collaborative filtering algorithm
- Curriculum Design: Automatic Robot Car* 04/2015-07/2016
- Devised an automatic robot car controlled by Microprogrammed Control Unit(MCU) based on ST NUCLEO-F446RE with mbed platform (C++) support; took charge of the obstacle avoidance function design
  - Placed three HC-SR04 ultra-sonic sensors with ranging distance from 2cm to 400cm, a resolution of 0.3cm and a measuring angle of 30 degrees in front of the car and on both sides and to detect and avoid obstacles
  - Programmed the MCU to calculate the distance according to the reflection time of the ultrasonic: utilized 'Moving-Average Filter' method to filter noise and set up a 'wake' signal to refresh the sensor if it was out of ranging distance
  - The robot car could finally run automatically and go across a bridge over the lake based on my ultra-sonic sensor module
- Curriculum Design: Facial Recognition Program* 11/2014-01/2015
- Designed a program to detect and recognize individual faces based on MATLAB
- Employed median filtering and normalization methods to preprocess photos, and principle component analysis to simplify data
  - Used support vector machine to train data and Viola-Jones method to detect faces
  - Achieved accuracy of more than 90% for individual face and more than 50% for group photo
- Curriculum Design: Optical Pulse Sensor* 03/2014-06/2014
- Collaborated in building instrument based on MBED LPC1768 to measure pulse by sensing reflection of light from blood in fingers
  - In charge of circuit design on OrCAD Capture and electronic component construction

## XIAO PENGFEI

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### INTERNSHIP

**National Supercomputing Center in Shenzhen, Shenzhen, China**

01/2017-02/2017

*Java Programmer*

- Built Hadoop platform under Linux system and preprocessing raw data including principle component analysis, normalization, smoothed moving average and regression for further analysis

### HONORS

Second Class People's Scholarship, UESTC

2013-2014; 2014-2015; 2015-2016; 2016-2017

Community Service Scholarship, UESTC

2014-2015

Excellent Student Cadre, Student Union, UESTC

2014-2015

### EXTRACURRICULAR ACTIVITIES

**Students' Representative Council of University of Glasgow, UESTC, Chengdu, China**

03/2015-07/2016

*Class Representative*

- Served as an important liaison between UESTC and UoG
- Collected students' feedback about the teaching mode or other general questions by doing survey, interviews and focus groups
- Organized monthly discussions with professors from UoG to reflect students' suggestions and find out ways to improve course quality

**Entertainment Department of Student Union of GCU, UESTC, Chengdu, China**

03/2014-06/2015

*Director*

- Directed a 15-member team to hold the first bilingual 2015 New Year's Party in my college
  - Invited 30 student performers from Sichuan Conservatory of Music and organized times rehearsals; built strong relations with School of International Education of UESTC and invited around 100 foreign students to join the Party
  - Led a one-month promotion campaign that successfully attracted over 1000 participants
  - Conducted a Bilingual Hosting Selection and selected 4 talented hosts from 29 candidates
- Managed an 18-member performance group and arranged over 10 shows in campus

**International Exchange Office, UESTC, Chengdu, China**

10/2014-06/2015

*Cultural Exchange Ambassador*

- Facilitated the visits of foreign campus guests, including sharing university's history and helping them with necessary arrangements
- Arranged the receptions for the professors from The Institution of Engineering and Technology(IET) and organized 3 academic panels with the professors from UESTC

**Cultural Exchange Summer Camp, UK and Ireland**

07/2014

*Team Leader*

- Assisted professionals from UoG and Association of Chinese Professionals in Ireland (ACPI) to arrange curriculum and coordinate activities
- Led a three-member team in writing the project report summarizing weekly learning experience with local students, and earned second-highest score among six teams

### SKILLS

**Languages:** native Mandarin; fluent in English (IELTS – 7.0; GRE – V: 156, Q: 166, AW:

3.0) **Computers:** Python; JAVA; C programming language

**Simulation Software:** MATLAB; Multisim; OrCAD Capture