

Zhao Shouren

**E-mail:** [E0015256@u.nus.edu](mailto:E0015256@u.nus.edu) **TEL.:**65-82450168

**Nationality:** Chinese **Age:** 24 **Gender:** Male

**Add.:** Blk 868, Yishun Street 81, Singapore, 760868

# Education

**01/2016-02/2017 National University of Singapore**

Master of Science (Electrical & Computer Engineering) GPA: 3.75/5.0

**08/2011-06/2015 Southeast University** (Nanjing, China)

Bachelor of Engineering (Electronic Science & Technology) GPA:3.46/4.0

# Core curriculums

Pattern Recognition, Neural Network, Real-time System, Computer Network, Multimedia Computing & Application, Programming & Algorithmic Language, Computer Architecture & Logic Design, Multiprocessor System, Design of Electronic System, Image Processing.

# Skills

Programming Language: **C, C++, Java, Matlab, Python.**

Knowledge: Data Structure & Algorithm, Operating System, TCP/IP, Database

Specialty: Machine learning, Computer vision, Real-time systems, Embedded system, Android development, NFC, RFID, Bluetooth, MFC, Computer control system.

Familiar with Windows and Linux environment.

# Work experience

**16/01/2017-Present ASM Pacific Technology (Singapore) Software engineer**

* **2D Strip Map Real-time Display**
* According to parameters of function, used MFC list box controller to user-friendly draw all chips in the lead frame
* Chosen suitable data structure to save the info of lead frame and efficient algorithm to search the target cell
* This MFC tool can maximally draw a 128\*512 lead frame and only take a little system resource
* **License Management for Valuable Features**
* Designed data structures and algorithms to manage features according to license info accurately and user-friendly
* **Icon Management**
* Developed a thread to detect the status of each feature of system and update its icon in real time (replace trigger by operation in previous)
* **Fixed bugs according to manager’s assignment**

# Internships

**01/06/2016-31/08/2016 Huawei International Technologies (Singapore) Software engineer**

* Developed NFC (Near Field Communication) software operating in development board in C Language
* Developed Android application (in Java) and exchange data with development board (with NFC)
* Added SHA-2 algorithm (with key and random number) to both development board and Android phone for authentication

**30/06/2014-29/08/2014 Shenzhen Software Industry Association Software engineer**

* Learned how to test and assess software products
* Assisted the managers to audit the software enterprises and software products
* Participated in the organizational work of training lectures and software products exhibition

**08/07/2013-09/08/2013 Shenzhen Sunline Tech Co., Ltd. Software engineer**

* Involved in the development of Financial Information Technology software
* Got familiar with the development of commercial bank software including business class, management class and channel class

# Publications

X. Jiang, **S. Zhao**, Z. Zhou, N. Zhao, "Intelligent & Wireless Management System Based on RFID Technique", 7th IPS International Collaboration Symposium (IPS-ICS 2013), Kitakyushu, Japan, November 2013.

# Honors & awards

04/2014 Second Prize of Student Research Training Program of Jiangsu Province awarded by Southeast University

06/2013 Third Prize of 10th Vision Guided Robot Race awarded by Southeast University

06/2013 Third Prize of Mathematical Contest in Modeling awarded by Southeast University

# Projects

01/2016-05/2016 Advisor: Dr. Sun Ying & Feng Jiashi

* **Pattern recognition project: Handwritten Digital Recognition**
* Used four novel Machine learning methods to process handwritten digital images and recognized the number.
* The Methods: Principle Component Analysis, Linear Discriminative Analysis, Support Vector Machine, Convolutional Neural Networks

01/2016-03/2016 Advisor: Dr. Xiang Cheng

* **Neural network project: Facial Attribute Recognition**
* Used Multi-Layer perceptron solve the facial attribute recognition problems.

03/2016-05/2016 Advisor: Dr. Peter C. Y. Chen

* **Support Vector Machine for classification of cancerous cell**
* **Reinforcement Learning for world grid navigation**

12/2012-03/2014 Advisor: Zhao Ning

* **Intelligent & Wireless Management System Based on Radio Frequency Identification Technique**
* This system consists of four parts: the RFID base station system, the tag reader system, the wireless transmission system and the database management system. My mission focused on the tag reader system and database:
* Understood the communication protocol between chip AS3992 and radio frequency tag
* Filtered, extracted and translated the information of tag in C#
* Applied MySQL database

09/2013-12/2013Advisor: Prof. Tang Yongming

* **Wireless meal ordering system based on MCU and FPGA combined platform**

05/2013

* **Mathematical Contest in Modeling (College Scholarship Distribution Problem)**

01/2013

* **Vision Guided Robot Race**
* Designed the control circuit and assembled the robot
* Wrote the code (C language) for discerning and reacting to the racing track