# ZHENG YUE

**Fall 2015 Electrical Engineering (PhD) Applicant • Application Id: 567167**
**Add.**: Room 304, Building X1, No 99, ShangDa Road, Baoshan District, Shanghai
**Tel.** (86)18817393392 • **Email**: zhengyue1005@gmail.com

## EDUCATION

**Bachelor of Engineering**, Shanghai University, Shanghai — Sept. 2011-Jul. 2015
Major: Communication Engineering
GPA: 3.87/4.00 (95.62/100)
Ranking: **1**/368

## AWARDS AND HONORS

**Competition Prize**

- 2014 Intel Cup Undergraduate Electronic Design Contest — Second Prize (Top 20 in 170)
- 2013 National Undergraduate Electronic Design Contest — Third Prize
- 2012 Campus Wide Higher Mathematics Competition — Second Prize
- 2012 Campus Wide Physics Competition — Second Prize

**Scholarship**

- July 2015 — Excellent Graduate Award
- July 2015 — Excellent Final Yeal Project
- 2013-2014 — National Scholarship — (Top 3 in 368 )
- 2013-2014 — Principal Scholarship — (Top 3%)
- 2012-2013 — Principal Scholarship — (Top 3%)
- 2011-2012 — Principal Scholarship — (Top 3%)
- 2013-2014 — Excellent Student Award — (Top 3%)
- 2012-2013 — Excellent Student Award — (Top 3%)
- 2011-2012 — Excellent Student Award — (Top 3%)
- 2012-2013 — Self-improvement Scholarship
- 2011-2012 — Self-improvement Scholarship
- 2013-2014 — Academic Innovation Scholarship — (Top 5%)
- 2012-2013 — Academic Innovation Scholarship — (Top 5%)

## STANDARDIZED TESTS

**TOEFL**: 98 (26+27+23+22)
**GRE**: 316 (149+167+3.5)

## RESEARCH AND PROJECTS

*Shanghai Undergraduate Innovation Project*

**Campus Bicycle Identification System** — Sept. 2014-July.2015

*Group leader, supervisor: Professor Peng Zhangyou, Professor Wang Rui*

- Aimed at designing a real-time anti-theft system through the use of UHF RFID technology
- Identified bicycles by matching the electronic tags attached in the bicycle tires with tags attached in the key chains in the Student Information Database
- Proposed a scheme to realize a far read range of 20 to 30 meters while using UHF reader, circular polarization antennas and passive tags
- Oversaw multi-tag reading and anti-collision algorithm design under complicated environment

## *Competition Projects*

**Robot Express Delivery System** Mar. 2014-Jul. 2014

*Second Prize Winner in 2014 Intel Cup, supervisor: Engineer Li Yufeng*

- Programmed under Linux with ROS (robot operating system) as secondary system
- Built a fuzzy model and realized fuzzy algorithm for autonomous navigation and orientation
- Proposed a new image processing approach to Visual Slam for Feature Extraction and Real-Time performance enhancement
- Set up communication protocol and created a website for REDS

**Single-Phase AC-DC Convertor** Jun. 2013-Sept. 2013

*Third prize winner, supervisor: Associate chair Zou Wenxiao, Engineer Xie lei*

- Applied MOS full bridge rectifier
- Corrected input signal power factor by using TL3843
- Designed a Buck-Boost circuit and realized over-voltage protection
- Outputted steady 36V from 220v 50Hz input, efficiency: 90%
- Welded the electric circuit

## *Course Projects (Team leader)*

**3D Virtual Facial Animation** Sept. 2014-Oct. 2014

- Realized 3D face modeling with multiple types of facial expression animation (i.e. happy, angry)
- Realized the operation toward point set coordinate

**Two-Way Duplex TDM System** Nov. 2013-Jan. 2014

- Built a TDM transmission system in Gaussian channel
- Applied FPGA to generate clock and sampling signal
- Designed a PCB board and conducted soldering operation

**Library Management System Based on C#** Sept. 2013-Dec. 2013

- Set up a SQL Server database to store information about readers and books
- Realized a connection with the database and designed a system for readers and administrator to log in
- Created functions for the input, output, searching and sorting of books
- Allowed the administrator to release news and for readers to leave a message

**Digital Thermometer** Apr. 2013-May. 2013

- Actualized temperature collection by using DS18B20
- Implemented an audio feedback system at temperature thresholds with precision of 0.1 ℃
- Applied assembly programming

**AD Converter (ADC)** Jan. 2013-Feb. 2013

- Generated different quantization levels by adopting precision resistance divider
- Designed a LM339 circuit to implement the comparison between external Vin with the quantitative level
- Displayed the voltage level of Vin through digital tube

**DTMF Tone Recognizer** Nov. 2012-Dec. 2012

- Interpreted the frequency characteristics of the audio signal
- Acquired and processed the speech signal
- Realized the recognition of keys through filtering process