**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](mailto: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

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| --- | --- | --- |
| * 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