# SHEN YI

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# Objectives

- To earn a graduate degree in Electrical and System Engineering
- To work as an engineer in my relevant field

# **Education Background**

## School of Control Science and Engineering (SCSE)

Shandong University, Jinan, Shandong Province, China

B.E. in Automation (Brilliant)

Expected June 2017

GPA: 88.64/100

Honors: 2013-2014 Second-class scholarship at Shandong University

2014-2015 Third-class scholarship at Shandong University

2015-2016 Exchange student scholarship at Shandong University

2014 Hosonic Electronic Co., Ltd. Scholarship

### **School of Electrical Engineering**

August 2015-December 2015

Korea University, Seoul, South Korea

GPA: 3.38/4.5 (87.2/100)

Honors: Global Korea University scholarship

# Research & Competition Experience

## Senior Design Project

Mobile Robot Planning Algorithm

Jan. 2017 -Present

- Independent project
- Wrote an overview on planning algorithms, compared their pros and cons and fulfilled different algorithms by programming in MATLAB, Visual C++ and Python.
- Built the simulation environment in *ARIA* and *MobileSim* and applied them into mobile robot *Adept*.

### **Ball Detection Project**

Color Learning and Target Detection

Sep. 2016 -Nov.2016

Independent project

- Estimated a Gaussian model for the ball color, and developed a ball detection function based on the color model.
- Collected color samples from the training images, visualized and observed the color distribution
  of the collected samples by using MATLAB.
- Computed the location of the new ball and applied filtering on the RGB image using binary process.

# **ROBOWORK(China Engineering Robotics Competition)**

Gymnast Robot: First-class Prize

Apr. 2016 -May.2016

#### Rizhao, China

- Rethought and summarized the drawbacks of the first competition and solved several significant bugs by changing the control array code to meet reality rather than computing theoretically.
- Designed a new circuit board with optimized chips, robot actions and mechanical structures, and introduced an upper computer for testing and programming.
- As the group leader, recruited new team members, introduced the project to the, and made plans for the group's work according to each person's strengths.

### Huai'an, China

- Designed the control and drive circuit, chose the appropriate chips and servo motors, and welded the circuit board.
- Responsible for servo motor control programming and circuit output testing work in the competition, designed each movement for the gymnast's actions.
- As the team leader, managed a team of three students from different majors to work together; made time-schedules and delegated programming, circuit design and configuration design work to team members.

# Internship & Work Experience

### **B&R Industrial Automation**

Internship

Jan.2017-Present

#### Shanghai, China

- Worked in Supporting & Training team, created project plans, developed and documented control application designs for MOOC training.
- Got accustomed to motion control systems, IEC 61131-3 programming languages and PLC open functions, learnt the basic knowledge about PLC market and corporation between companies and universities.

### School of Control Science and Engineering, Shandong University

Teaching Assistant (Linear Algebra)

Sep. 2016 -Jan.2017

#### Jinan, China

- Corrected students' homework and provided feedback to the professor
- Mentored and answered questions from students

## Extra-curricular Activities

- Honorary title of Excellence Publicity Figure of Shandong University
   Sep. 2015–Jun.2016
- Second place at the Science and Technology Innovation Competition at Shandong University

Mar. 2016

- Head of the News Media Division of the SCSE Student Union
   Sep. 2014–Jun.2015
- Honorary title of Outstanding Individual of Shandong University Sep. 2014–Jun.2015
- Third place at the Energy Saving and Emission Reduction Contest at Shandong University

Nov. 2014

- Project leader of Shandong University Orientation for international exchange students Feb. 2015
- First place at the "Challenge Cup" Student Business Plan Competition at Shandong University

Iun. 2014

### Additional Skills

- Language skills: TOEFL IBT: 101; GRE: Verbal 153, Quantity 170;
- Computer skills: Master of C, Python; Proficient in MATLAB; MATHCAD; LaTeX; Adobe After Effect; Corel Video Studio; Automation Studio.