

# Honggang Gou

E-mail: garypursuit@gmail.com

Github: <https://github.com/SchwartzSkipper>

## EDUCATION

### Non-degree Program

**Technische Universität Darmstadt**, Darmstadt, Germany

*Exchange student in Mechanical Engineering and Computer Science*

Fully funded by China Scholarship Council

Overall of GPA: 2.55/1.0 (good)

Core Courses: Robot Learning Integrated Project, Statistical Machine Learning

09/2015-10/2016



### Degree Program

**Nanjing University of Aeronautics and Astronautics**, Nanjing, P.R.China

*B.Eng in Aircraft Manufacturing Engineering*

Thesis: A Robot arm playing badminton simulated in SL-Lab

Overall of GPA: 3.6/5.0 (86/100)

Core Courses: Advanced Mathematics, Theoretical Mechanics, Electrical and Electronic Technology, Mechanical Principle and Design, Control System

09/2012-06/2017



## WORK EXPERIENCES

**HRG, HIT Robot Group**, Kunshan, Jiangsu, P.R.China

**Algorithm Engineer, ROS(Robot Operating System) Branch**

07/2017-08/2018

- Github Page: <https://github.com/hitrobotgroup>
- Promoted the performance and robustness of indoor AGVs by modifying or writing ROS navigation stack, specifically the global and local planners. Wrote a local planner to generate trajectories based on bezier curves.
- Integrated and implemented existed open-source Lidar-SLAM to accommodate indoor localization and navigation.
- Managed the public github account of ROS developers belonged to our group.
- Exhibited in several leading fairs of Automation and Robotics, Auomatica in Munich Germany and CeMAT in Shanghai China, not only demonstrating AGVs in motion but also delivering English presentations to visitors.
- Responsible for certain implementations of AGV projects in the factories and warehouses of clients, such as Harman Kardon(Suzhou) and Innolux Corporation (Shanghai).

## PROJECT EXPERIENCES

**Autonomous System Lab, Technische Universität Darmstadt**, Darmstadt, Germany

*Robot Learning: Integrated Project Part I*

04/2016-10/2016

- Participated in an Integrated Project, Robot Badminton, a robot arm to play badminton, of Autonomous System Lab in the Robotics Branch of Computer Science, majorly programming in C.
- By utilizing kalman filters, the dynamic trajectories of a flying shuttlecock and feasible hitting position were predicted. And by implementing the minimum jerk controller by adapting the Transpose Jacobian method, the simulated movement of manipulator was smoothened.
- With the help of the Simulation Lab developed by Prof. Stefan Schaal, we completed an autonomous simulated methodology for a robot arm to play badminton in Simulation Lab.

Supervisor: Boris Belousov and Jan Peters.

## ACADEMIC SKILLS

**Programming**— C/C++, Matlab, Julia; Script(Python, Shell); Markup(L<sup>A</sup>T<sub>E</sub>X, XML); System(ROS, Ubuntu, Git)

**Languages**— English: TOEFL.IBT(99), GRE(323: Verbal 158, Quantitative 165)

## EXTRACURRICULUM ACTIVITIES

**Student Affairs Service Center, NUAA**, Nanjing, P.R.China

Volunteer, Director of Service Branch

09/2012-09/2013

- Worked as a volunteer for one year in a students' organization to help freshmen with enrollment and academic affairs.
- Participated in the recruitment as the director of service branch. Completed a new version of Service Guide for training the newcomers.

## GRANTS AND AWARDS

- 2nd Scholarship, Merit Students, NUAA AY 2012-2014
- Excellent Volunteer, Student Affairs Service Center, NUAA 10/2013
- China Scholarship Council (CSC) Exchange Student Scholarship, NUAA 05/2015
- TU-Darmstadt Semester Scholarship, Deutscher Akademischer Austausch Dienst(DAAD) 11/2015