

Honggang Gou

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

EDUCATION

Non-degree Program

Technische Universität Darmstadt, Darmstadt, Germany

Exchange student in Mechanical Engineering and Computer Science

09/2015-10/2016

Fully funded by China Scholarship Council

Overall of GPA: 2.55/1.0 (good)

Core Courses: Robot Learning Integrated Project, Statistical Machine Learning



Degree Program

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

B.Eng in Aircraft Manufacturing Engineering

09/2012-06/2017

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



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.
- Participated in several leading exhibitions of Robotics, Auomatica in Munich Germany and CeMAT in Shanghai China.

Nullmax Inc., Shanghai, P.R.China

SLAM Engineer, LiDAR Perception Branch, L4 Autonomous Driving

12/2018-now

- Modified ROS drivers for Velodyne LiDARs, including motion compensation and fusion of pointclouds.
- Currently engaged in calibration between sensors, LiDAR, camera and IMU, including intrinsic and extrinsic.
- Will engage more in localization and mapping work for urban environments.

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.

Supervisor: Boris Belousov and Jan Peters.

ACADEMIC SKILLS

Programming— C/C++, Matlab, Julia; Script(Python, Shell); Markup(L^AT_EX, XML); System(ROS, Ubuntu, Git)

Languages— English: TOEFL.IBT(101), GRE(323: Verbal 158, Quantitative 165)

EXTRACURRICULUM ACTIVITIES

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