

YOUNGSUN KWON

Education

2016 – Present	Ph.D. student, School of Computing, KAIST (advisor: Sung-Eui Yoon)
2014 – 2016	M.S., Robotics Program, KAIST (advisor: Sung-Eui Yoon)
2010 – 2014	B.S., Electronic & Electrical Engineering, Sungkyunkwan University
2010 – 2014	B.S., Computer Engineering, Sungkyunkwan University (double major)

Research Interest

- Environment Mapping
- Sensor-based Motion/Path Planning
- Uncertainty aware Collision Detection

Publications

ICRA 2017 WS	Ray Distribution to Parallel Batching-based Updates, Yongsun Kwon and Sung-eui Yoon, IEEE International Conference on Robotics and Automation(ICRA) 2017 Workshop on Robotics and Vehicular Technologies for Self-driving cars
ICRA 2016	Super Ray based Updates for Occupancy Maps, Yongsun Kwon , Donghyuk Kim, and Sung-Eui Yoon, IEEE International Conference on Robotics and Automation(ICRA) 2016

Awards

REAL-TIME UPDATES FOR OCCUPANCY MAPS

- **1st place** in Korea Computer Congress (KCC) 2017 SW Implementation/Demo Contest held in Korea (**Microsoft Research Award**)

ROBOT SOCCER: MIROSOT

- **1st place** in 2010 IRC FIRA Challenge Cup held in Korea (**Prime Minister Award**)
- **Commendation** in Spring of 2011 from Sungkyunkwan University for FIRA Challenge Cup
- **3rd place** in 2011 FIRA RoboWorld Cup held in Taiwan
- **1st place** in 2011 FIRA Korea Cup held in Korea
- **Commendation** in Fall of 2011 from Sungkyunkwan University for FIRA RoboWorld Cup and FIRA Korea Cup
- **Representative Team of Korea** in 2011 IRC Invitation Competition held in Korea
- **4th place** in 2012 FIRA RoboWorld Cup held in United Kingdom
- **1st place** in 2013 IRC FIRA Challenge Cup held in Korea (**Ministry of Trade Industry & Energy Award**)

ROBOT SOCCER: TEEN-SIZE HUMANOID

- **6th place** in 2013 RoboCup held in Netherlands

SAMSUNG SW CLUB CHAMPIONSHIP

- **Participation** in 2012 Samsung SDS SW Club Championship
- **2nd place** in 2013 Samsung SDS SW Club Championship

Activities

OPEN SOURCE

- SuperRay: <http://sglab.kaist.ac.kr/projects/SuperRay> or <https://github.com/PinocchioYS/SuperRay>
- SuperRay: <https://github.com/PinocchioYS/ParallelBatch>

S.I.O.R. (SUNGKYUNKWAN INSTITUTE OF ROBOT): CLUB FOR MAKING ROBOTS

- 2012 Leader of S.I.O.R.
- Robot Soccer: Mirosot
- Robot Soccer: Teen-Size Humanoid
- 2010 ~ 2013 S.I.O.R Exhibition: Line Tracer, LED Electric Piano, Drawer, Speech-To-Text Chess

Programming

- Language: C, C++, Java, Matlab
- GUI: Qt, MFC
- ROS (Robot OS) Programming