# Sangil Lee

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## **EDUCATION**

- · 2017.09 ~ present, Ph.D. Student, Mechanical and Aerospace Engineering, Seoul National University, Seoul, Korea
- · 2015.03 ~ 2017.08, M.S. Student, Mechanical and Aerospace Engineering, Seoul National University, Seoul, Korea
- · 2010.03 ~ 2015.02, B.S., Electrical & Computer Engineering, Seoul National University, Seoul, Korea

#### **EXPERIENCE**

Apr. 2010 - Present: Member of Robotics Clubs, "Sigma Intelligence," Seoul National University

- · Served as education director, Mar. 2011 Feb. 2012
  - Made a curriculum of annual education
  - Taught AVR/ MATLAB programming to freshmen
- · Served as club vice president, Mar. 2012 Feb. 2013
  - Assisted club president with managing clubs
- Won a first prize in an 2012 International Capstone Design Fair with iDEN, home platform robot and action application modules

# **SKILLS**

C & C++ / MATLAB / ROS (Robot Operating System) / AVR & Arduino & Arm Processor Programming / Basic Spartan Board Programming / Basic OrCAD & Solidworks

# **PUBLICATIONS**

- · Sangil Lee and H. Jin Kim, "Real-time Robust Visual Odometry via Rigid Motion Segmentation for Dynamic Environments," *IEEE Robotics and Automation Letters*, 2017. (under review)
- · Sangil Lee and H. Jin Kim, "Real-time Rigid Motion Segmentation using Grid-based Optical Flow," *System, Man, and Cybernetics, IEEE International Conference on*, 2017.

- · Sangil Lee, P. Jin Kim, Changhyeon Kim, Hyeonbeom Lee, and H. Jin Kim, "Survey on Visual Odometry Technology for Unmanned Systems," Journal of Institute of Control, Robotics, and Systems, 23(6):424-431, 2017.
- · Sangil Lee, P. Jin Kim, Changhyeon Kim, and H. jin Kim, "Depth-based Direct Visual Odometry for Stereo Camera," *Asia-Pacific International Symposium on Aerospace Technology*, 2016.
- · Sangil Lee, Seung-jae Lee, Jaehyun Park, and H. Jin Kim, "Exposure Correction and Image Blending for Planar Panorama Stitching," *International Conference on Control, Automation and Systems*, 2016 (Outstanding Paper Award).
- · Sangil Lee and H. Jin Kim, "Image Stitching for 2-D Global Mapping," 31<sup>st</sup> Institute of Control, Robotics and Systems Annual Conference, March 10-11, 2016.
- · Sangil Lee and H. Jin Kim, "Hexa-rotors 3-dimensional Position Control based on Spiral Potential Function with Collision Avoidance," *The Korean Society for Aeronautical & Space Sciences Fall Conference*, November 18-20, 2015.
- Sangil Lee and H. Jin Kim, "Detection of 3-Dimensional Textured Object without Depth Information," 14<sup>th</sup> International Conference on Control, Automation and Systems, Korea, October 13-16, 2015.

### **AWARDS/ACTIVITIES**

- · Outstanding Paper Award of the Ministry of Trade, Industry, and Energy, Oct. 2016
- · BK21 plus PhD Fellowship Scholarship, Mar. 2015 Feb. 2016
- · First prize in an 2012 International Capstone Design Fair, Jan. 2012