

## Junha Roh

Computer Science and Engineering, <http://junha.io>  
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### RESEARCH INTERESTS

Artificial Intelligence, Robotics

### EDUCATION

**University of Washington** (Sep 2016 - Present)  
Graduate student in Computer Science and Engineering  
Advisor: Dieter Fox and Ali Farhadi

**Seoul National University** (Mar 2011 - Feb 2013)  
M.S. in Electrical Engineering and Computer Science  
Advisor: Kyoung Mu Lee

**Seoul National University** (Mar 2007 - Feb 2011)  
B.S. in Electrical and Computer Engineering, *Summa Cum Laude*

**Seoul Science High School** (March 2005 - February 2007)

### APPOINTMENTS

**Researcher (on leave)** Mar. 2013 - Present  
*Korea Institute of Science and Technology*

### PROJECTS

**Mesh alignment with texture for dynamic 3D modeling** Nov. 2014 - Sep. 2016  
*Korea Institute of Science and Technology*  
Alignment of meshes using geometry and texture for high quality 3D modeling of dynamic objects.

**TGV- $l^1$  Scene flow estimation for dynamic 3D modeling** Dec. 2013 - Sep. 2014  
*Korea Institute of Science and Technology*  
A fast TGV- $l^1$  scene flow estimation from RGB-D stream for dynamic 3D modeling.

**Video editing and free view generation** Aug. 2013 - Nov. 2013  
*Korea Institute of Science and Technology*  
Video editing and free view generation from multiple cameras.

### PUBLICATIONS

**Junha Roh**, Hwasup Lim, and Sang Chul Ahn, *A Fast TGV- $l^1$  RGB-D Flow Estimation*, 10th International Symposium on Visual Computing (ISVC 2014, **oral**)

Junseok Kwon, **Junha Roh**, Kyoung Mu Lee and Luc Van Gool, *Robust Visual Tracking with Double Bounding Box Model*, European Conference on Computer Vision (ECCV 2014, **27.6%** acceptance rate)

**Junha Roh**, Dong Woo Park, Junseok Kwon and Kyoung Mu Lee,  
*Visual Tracking using the Joint Inference of Target State and Segment-based Appearance Models*,  
Asia Pacific Signal and Information Processing Association Conference (APSIPA 2013, *oral*)

**Junha Roh**, *Visual Tracking using Joint Inference of Target State and Segment-based Appearance Models*, Masters thesis, 2013, Seoul National University, Korea

## COMPUTER SKILLS

Proficient programming skills in C, C++ with OpenCV, and MATLAB.  
Conversant with C#, Java, Python, JavaScript, L<sup>A</sup>T<sub>E</sub>X.

## HONORS AND AWARDS

Samsung Scholarship, \$50,000 per year (2016 - 2021)  
Fulbright Scholarship, \$70,000 for two years (gratefully declined, 2015)  
Kwanjeong Educational Foundation Scholarship for Graduates, \$9,000 per year (2011 - 2012)  
Commendation from Seoul National University Engineering Alumni Association (2011)  
Volunteer Award, Dept. of Electrical Engineering, Seoul National University (2011)  
Seoul National University Foundation for ECE Scholarship, \$3,500 (February 2011)  
National Science & Engineering Undergraduate Scholarship, \$6,000 per year (2007 - 2010)  
Silver Medal in Korea Physics Olympiad (2005)

## PATENTS

Pending: Device for extracting depth information using infrared light and method thereof, 2014  
U.S. Patent Application Number: 20,140,361,175  
Device for extracting depth information using infrared light and method thereof, 2015  
Korea Patent Number 101,487,812  
Apparatus and method for automatic animation of an object inputted randomly, 2015  
Korea Patent Number 101,496,440

## EXTRACURRICULAR ACTIVITIES

Areumtor, taught high school students math  
Edushare, taught middle school students math and science  
Editor and designer of the Departmental Newsletter, Dept. EE, Seoul National University, Sep. 2010 - Dec. 2010  
Tutor, College of Engineering, Seoul National University, Sep. 2009 - Feb. 2010  
Undergraduate Research Program, Korea Foundation for the Advancement of Science and Creativity, Sep. 2008 - Oct. 2009