Sunghoon Im (Male)

CONTACT INFORMATION 1989/02/07 (Male) Room 211, Bldg N1, KAIST

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RESEARCH INTERESTS

- 3D Reconstruction
- Stereo matching
- Computational photography

EDUCATION

KAIST, Daejeon, Korea

Ph.D. Student, Electrical Engineering, Mar 2016-Present

• Advisor: Prof. In So Kweon

KAIST, Daejeon, Korea

M.S., Electrical Engineering, Feb 2016

- Thesis: "Structure from Small Motion for Hand-held Cameras"
- Advisor: Prof. In So Kweon
- GPA: 3.81/4.3

Sogang University, Seoul, Korea

B.S., Electronic Engineering, Feb 2014

- Advisor: Prof. Gyeonghwan Kim
- Summa cum laude (GPA: 3.91/4.3)

RESEARCH EXPERIENCES

KAIST, Daejeon, Korea

Research Assistant, Robotics and Computer Vision Laboratory

Mar 2014 - present

- Advisor: Prof. In So Kweon.
- Researched computer vision algorithms, especially for 3D reconstruction and stereo matching.

Sogang University, Seoul, Korea

Research Assistant, Man Machine Interface Laboratory

Jun 2013 – Feb 2014

- Advisor: Prof. Gyeonghwan Kim.
- Researched computer vision algorithms, especially for driver monitoring system.

PUBLICATIONS

International Conference

- 1. **Sunghoon Im**, Hyowon Ha, Francois Rameau, Hae-Gon Jeon, Gyeongmin Choe and In So Kweon, "All-around Depth from Small Motion with A Spherical Panoramic Camera", *In Proc. of European Conference on Computer Vision* (ECCV), Oct 2016.
- 2. Hyowon Ha, **Sunghoon Im**, Jaesik Park, Hae-Gon Jeon and In So Kweon, "High-quality Depth from Uncalibrated Small Motion Clip", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (**CVPR**) [*Oral*], Jun 2016.
- 3. Hae-Gon Jeon, Joon-Young Lee, **Sunghoon Im**, Hyowon Ha and In So Kweon, "Stereo Matching with Color and Monochrome Cameras in Low-light Conditions", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (**CVPR**), Jun 2016.

- 4. **Sunghoon Im**, Hyowon Ha, Gyeongmin Choe, Hae-Gon Jeon, Kyungdon Joo and In So Kweon, "High Quality Structure from Small Motion for Rolling Shutter Cameras", *In Proc. of IEEE International Conference on Computer Vision* (**ICCV**), Dec 2015.
- 5. **Sunghoon Im**, Gyeongmin Choe, Hae-Gon Jeon and In So Kweon, "Depth from Accidental Motion using Geometry Prior", *In Proc. of IEEE International Conference on Image Processing* (**ICIP**) [*Top 10% paper*], Sep 2015.

Other Publications

- 1. Jaeheung Surh, Hae-Gon Jeon, Hyowon Ha, **Sunghoon Im** and In So Kweon, "Fast Depth from Defocus with Your Mobile Phone for Synthetic Defocus", *In Proc. of the 28th Workshop on Image Processing and Image Understanding* (**IPIU**), Feb 2016.
- 2. **Sunghoon Im**, Hae-Gon Jeon, Hyowon Ha and In So Kweon, "Depth Estimation from Light Field Cameras", *In Proc. of the 12th International Conference on Ubiquitous Robots and Ambient Intelligence* (URAI), Oct 2015.
- 3. Dong-jin Kim, Donggeun Yoo, **Sunghoon Im**, Namil Kim, T. Sirinukulwattana and In So Kweon, "Relative Attributes with Deep Convolutional Neural Network", *In Proc. of the 12th International Conference on Ubiquitous Robots and Ambient Intelligence* (URAI), Oct 2015.

Honors	&
AWARDS	

• Qualcomm Innovation Award 2016, Qualcomm Korea Corp. and KAI	ST Mar 2016
• Silver prize, 22th HumanTech Paper Award, Samsung Electronics Co.,	, Ltd. Feb 2016
• Best Poster Award, IWRCV 2015 General Chair	Nov 2015
• Officail Best 10% Paper Selection, ICIP 2015 Organizing Committee	Sep 2015
Summa Cum Laude, Sogang University	Feb 2014
• Design project competition(Silver Prize), Sogang University	Nov 2013
• Scholarship, Sogang alumni association	Seb 2012 – Feb 2013
• Scholarship, Korea Scholarship Foundation	Feb 2012 – Feb 2014
• Prize for the top first percentile GPA, Sogang University Sep 2011,	Feb 2012, Sep 2012

EXPERIENCES

Teaching Experience

• EE209, Programming Structure for Electrical Engineering	Fall 2014 – Fall 2015
 Volunteer work. Mathmetics at an orphanage 	Feb 2008 – Feb 2009

Extra Experience

• P	Presenter, Korea Electronic Show (KES 2015), Ilsan, Korea	Oct 2015
• P	Presenter, NVIDIA GTC Korea 2015, Seoul, Korea	Sep 2015

IT SKILLS

• Languages: C, C++, MATLAB, LATEX