

## Jinsun Park

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CONTACT INFORMATION	Room 212, IT Convergence Bldg. (N1), KAIST 291 Daehak-ro, Yuseong-gu, Daejeon 34141 Republic of Korea (South Korea)	zzangjinsun@kaist.ac.kr <a href="https://zzangjinsun.github.io/">https://zzangjinsun.github.io/</a>
RESEARCH INTERESTS	<ul style="list-style-type: none"><li>• Deep Learning</li><li>• Computer Vision</li><li>• Multi-Modal Sensor Systems</li><li>• Depth Completion / Depth Estimation</li><li>• Image Super-Resolution</li></ul>	
EDUCATION	<p><b>KAIST</b>, Daejeon, Republic of Korea</p> <p>Ph.D Student, School of Electrical Engineering, Mar. 2016 – Present</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon</li></ul> <p><b>KAIST</b>, Daejeon, Republic of Korea</p> <p>M.S., School of Electrical Engineering, Feb. 2016</p> <ul style="list-style-type: none"><li>• Thesis: “A Unified Approach of Deep and Hand-crafted features for Defocus Estimation”</li><li>• Advisor: Prof. In So Kweon (Sep. 2015 – Feb. 2016)</li><li>• Advisor: Prof. Yu-Wing Tai (Mar. 2014 – Aug. 2015)</li></ul> <p><b>Hanyang University</b>, Seoul, Republic of Korea</p> <p>B.S., Department of Electronic Engineering, Feb. 2014</p>	
RESEARCH EXPERIENCE	<p><b>KAIST</b>, Daejeon, Korea Sep. 2017 – Present</p> <p><i>Researcher</i>, Korea Electric Power Corporation (KEPCO)</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon</li><li>• Researched Multi-sensor system for robust electric supply equipments detection and state inference.</li></ul> <p><b>KAIST</b>, Daejeon, Korea Jun. 2017 – Jan. 2018</p> <p><i>Researcher</i>, Electronics and Telecommunications Research Institute (ETRI)</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon</li><li>• Researched robust pose estimation under changing environment using deep local features.</li></ul> <p><b>KAIST</b>, Daejeon, Korea Jan. 2017 – Jan. 2018</p> <p><i>Researcher</i>, Electronics and Telecommunications Research Institute (ETRI)</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon</li><li>• Researched single image depth estimation using convolutional neural networks (CNN).</li></ul> <p><b>KAIST</b>, Daejeon, Korea Jul. 2016 – Aug. 2018</p> <p><i>Researcher</i>, Bosch Shared Sensing for Cooperative Cars</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon</li><li>• Researched place recognition algorithm using convolutional neural networks (CNN).</li></ul> <p><b>KAIST</b>, Daejeon, Korea Mar. 2014 – Dec. 2015</p> <p><i>Researcher</i>, Samsung Electronics (DMC research center)</p> <ul style="list-style-type: none"><li>• Advisor: Prof. In So Kweon (Sep. 2015 – Feb. 2016)</li><li>• Advisor: Prof. Yu-Wing Tai (Mar. 2014 – Aug. 2015)</li><li>• Researched depth distortion estimation and compensation for a commercial light-field camera</li><li>• Researched high-quality image generation from asymmetric stereo with catadioptric lens.</li></ul>	

INTERNATIONAL  
JOURNALS

1. Hae-Gon Jeon, Jaesik Park, Gyeongmin Choe, **Jinsun Park**, Yunsu Bok, Yu-Wing Tai and In So Kweon, “Depth from a Light Field Image with Learning-Based Matching Costs”, *IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)*, Feb 2019.
2. Oleksandr Bailo, Francois Remeau, Kyungdon Joo, **Jinsun Park**, Oleksandr Bogdan and In So Kweon, “Efficient Adaptive Non-Maximal Suppression Algorithms for Homogeneous Spatial Keypoint Distribution”, *Pattern Recognition Letters (PRL)*, Apr 2018.

INTERNATIONAL  
CONFERENCES

1. **Jinsun Park**, Kyungdon Joo, Zhe Hu, Chi-Kuei Liu, In So Kweon, “Non-Local Spatial Propagation Network for Depth Completion”, *European Conference on Computer Vision (ECCV)*, Aug 2020.
2. Gyumin Shim, **Jinsun Park** and In So Kweon, “Robust Reference-based Super-Resolution with Similarity-Aware Deformable Convolution”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun 2020.
3. Ho-Deok Jang, Sanghyun Woo, Philipp Benz, **Jinsun Park** and In So Kweon, “Propose-and-Attend Single Shot Detector”, *IEEE Winter Conference on Applications of Computer Vision (WACV)*, Mar 2020.
4. **Jinsun Park**, Ukcheol Shin, Gyumin Shim, Kyungdon Joo, Francois Rameau, Junhyeok Kim, Dong-Geol Choi and In So Kweon, “Vehicular Multi-Camera Sensor System for Automated Visual Inspection of Electric Power Distribution Equipment”, *IEEE / RSJ International Conference on Intelligent Robots and Systems (IROS)*, Nov 2019.
5. Ukcheol Shin, **Jinsun Park**, Gyumin Shim, Francois Rameau and In So Kweon, “Camera Exposure Control for Robust Robot Vision with Noise-Aware Image Quality Assessment”, *IEEE / RSJ International Conference on Intelligent Robots and Systems (IROS)*, Nov 2019.
6. Donghyeon Cho, **Jinsun Park**, Tae-Hyun Oh, Yu-Wing Tai and In So Kweon, “Weakly-and Self-Supervised Learning for Content-Aware Deep Image Retargeting”, *IEEE International Conference on Computer Vision (ICCV)*, Oct 2017. [Spotlight Presentation]
7. **Jinsun Park**, Yu-Wing Tai, Donghyeon Cho and In So Kweon, “A Unified Approach of Multi-scale Deep and Hand-crafted Features for Defocus Estimation”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Jul 2017.
8. Donghyeon Cho, **Jinsun Park**, Yu-Wing Tai and In So Kweon, “Asymmetric stereo with catadioptric lens: High quality image generation for intelligent robot”, *IEEE International Conference on Ubiquitous Robots and Ambient Intelligence (URAI)*, Aug 2016.
9. Hae-Gon Jeon, Jaesik Park, Gyeongmin Choe, **Jinsun Park**, Yunsu Bok, Yu-Wing Tai and In So Kweon, “Accurate Depth Map Estimation from a Lenslet Light Field Camera”, *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun 2015.

OTHER  
PUBLICATIONS

1. Francois Rameau, Oleksandr Bailo, **Jinsun Park**, Kyungdon Joo, Jaesung Choe and In So Kweon, “Real-time Demonstration of Collaborative Localization of a Swarm of Connected Vehicles ”, *International Workshop on Frontiers of Computer Vision (FCV)*, Feb 2018. [Best Demo Presentation Award]
2. Ole Johannsen, Katrin Honauer, Bastian Goldluecke, Anna Alperovich, Federica Battisti, Yunsu Bok, Michele Brizzi, Marco Carli, Gyeongmin Choe, Maximilian Diebold, Marcel Gutsche, Hae-Gon Jeon, In So Kweon, Jaesik Park, **Jinsun Park**, Hendrik Schilling, Hao Sheng, Lipeng Si, Michael Strecke, Antonin Sulc, Yu-Wing Tai, Qing Wang, Ting-Chun Wang, Sven Wanner, Zhang Xiong, Jingyi Yu, Shuo Zhang and Hao Zhu, “A Taxonomy

and Evaluation of Dense Light Field Depth Estimation Algorithms”, *IEEE Conference on Computer Vision and Pattern Recognition Workshop - Light Fields for Computer Vision (CVPRW-LF4CV)*, Jul 2017.

3. **Jinsun Park** and In So Kweon, “Single Image Depth Estimation using Convolutional Neural Networks with NCC-based Loss”, *International Workshop on Frontiers of Computer Vision (FCV)*, Feb 2017.

AWARDS	<ul style="list-style-type: none"> <li>• Best Demo Presentation Award, International Workshop on Frontiers of Computer Vision (FCV) Feb. 2018</li> <li>• Academic Achievement Award, Hanyang University Jul. 2013</li> <li>• National Full Scholarship, Korea Student Aid Foundation Mar. 2007 – Feb. 2014</li> </ul>
IT SKILLS	<ul style="list-style-type: none"> <li>• C, C++, Python, MATLAB, L<sup>A</sup>T<sub>E</sub>X</li> <li>• PyTorch, TensorFlow, ROS</li> </ul>
LANGUAGES	<ul style="list-style-type: none"> <li>• Korean, English</li> </ul>
TEACHING EXPERIENCE	<ul style="list-style-type: none"> <li>• TA for Programming Structure for EE Sep. 2014 – Jun. 2019</li> <li>• TA for Advanced Topics in Deep Learning for Robotics and Computer Vision Mar. 2018 – Jun. 2018</li> <li>• TA for Signals and Systems Mar. 2017 – Aug. 2017</li> <li>• TA for Signals and Systems Mar. 2014 – Aug. 2014</li> </ul>