

# Curriculum Vitae

Name : Donggeun Yoo (유동근)  
Date of Birth : August 13, 1986  
Address : 34, Daepyeong-ro, Sejong-si, 30153, South Korea  
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## Educations

2006. 3. – 2011. 1. BS in School of Electrical Engineering, KAIST, Daejeon, South Korea.
2011. 2. – 2013. 2. MS in School of Electrical Engineering, KAIST, Daejeon, South Korea.  
**Thesis** Learning Codeword Characteristics for Image Retrieval Using Very High Dimensional Bag-of-Words Representation  
**Advisor** Prof. In So Kweon
2013. 3. – 2019. 2. Ph.D. in School of Electrical Engineering, KAIST, Daejeon, South Korea.  
**Thesis** Deep Learning Based Visual Recognition Robust Against Background Clutters  
**Advisor** Prof. In So Kweon

## Career

2016. 5. – 2016. 8. Research intern at Adobe Research, San Jose, CA, USA.  
**Topic** Large-Scale Video Representation Learning  
**Advisor** Hailin Jin and Joon-Young Lee
2017. 3. – 2018. 2. Co-founder & Research Scientist at Lunit Inc., Seoul, South Korea.
2018. 3. – Present Co-founder & Head of Research at Lunit Inc., Seoul, South Korea.

## Research Interest

- Machine Learning Deep learning, unsupervised learning, semi-supervised learning, representation learning, active learning, transfer learning, domain adaptation, large-scale learning method, information retrieval.
- Computer Vision Visual recognition, image classification, object detection, semantic segmentation, image retrieval, medical image analysis, digital imaging bio-marker (DIB).

## Achievements

2009. 2. Grand Prize in KAIST Undergraduate Research Program (URP)  
**Topic** Portable Noncontact Heartbeat Sensor Using LC Oscillation  
**Advisor** Prof. Songcheol Hong

2015. 12. ImageNet Large Scale Visual Recognition Challenge (ILSVRC)  
 5th place at the main track (classification and localization) among 23 participants including world-leading companies such as Google, Microsoft Research, Samsung Electronics, and Qualcomm.  
 Invited to ILSVRC Workshop in ICCV 2015 to provide a talk about “Multi-Class AttentionNet”, which was selected as one of top 3 novel localization approaches.  
 Team name: Lunit-KAIST.
2017. 3. My transfer learning method, Multi-Scale Pyramid Pooling (MPP), was employed to Samsung Galaxy S8 Bixby Vision for fine-grained object classification and product retrieval.

### Selected Publications

1. Jongchan Park, Joon-Young Lee, **Donggeun Yoo**, In So Kweon, *Distort-and-Recover: Color Enhancement using Deep Reinforcement Learning*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.
2. Dahun Kim, Donghyeon Cho, **Donggeun Yoo**, In So Kweon, *Learning Image Representations by Completing Damaged Jigsaw Puzzles*, IEEE Winter Conference on Applications of Computer Vision (WACV), 2018.
3. Dahun Kim, Donghyeon Cho, **Donggeun Yoo**, In So Kweon *Two-phase learning for weakly supervised object localization* IEEE International Conference on Computer Vision (ICCV), 2017.
4. Youngjin Yoon, Hae-Gon Jeon, **Donggeun Yoo**, Joon-Young Lee, In So Kweon, *Light-field image super-resolution using convolutional neural network*, IEEE Signal Processing Letters, 24(6), 848-852, 2017.
5. **Donggeun Yoo**, Sunggyun Park, Kyunghyun Paeng, Joon-Young Lee, In So Kweon, *Action-Driven Object Detection with Top-Down Visual Attentions*, arXiv preprint, 2016.
6. **Donggeun Yoo**, Namil Kim, Sunggyun Park, Anthony S Paek, In So Kweon, *Pixel-Level Domain Transfer*, European Conference on Computer Vision (ECCV), 2016.
7. **Donggeun Yoo**, Sunggyun Park, Joon-Young Lee, Anthony S Paek, In So Kweon *Attentionnet: Aggregating weak directions for accurate object detection* IEEE International Conference on Computer Vision (ICCV), 2015.
8. Youngjin Yoon, Hae-Gon Jeon, **Donggeun Yoo**, Joon-Young Lee, In So Kweon, *Learning a deep convolutional network for light-field image super-resolution*, IEEE International Conference on Computer Vision (ICCV) Workshop, 2015.
9. **Donggeun Yoo**, Sunggyun Park, Joon-Young Lee, In So Kweon, *Multi-scale pyramid pooling for deep convolutional representation*, IEEE Conference on Computer Vision and Pattern Recognition (CVPR) Deep Vision Workshop, 2015.
10. **Donggeun Yoo**, Kyunghyun Paeng, Sunggyun Park, Jungin Lee, Seungwook Paek, Sung-Eui Yoon, In So Kweon, *PRISM: a system for weighted multi-color browsing of fashion products*, International Conference on World Wide Web (WWW), 2014.