### Woo Young Kang.

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# Education& Employment

### Surromind Robotics, August 2017 -

• Assistant Researcher

### Seoul National University, September 2015 – August 2017

- M.S. in Computer Science and Engineering
- Advisor: Byoung-Tak Zhang
- GPA: 3.76/4.3

### Chonbuk National University, March 2008 – August 2014

- B.S. in Computer Engineering.
- GPA: 3.88/4.0

#### **Skills**

### Web Technology

JavaScript, HTML

## **Programming Languages**Python, Matlab, C/C++, JAVA,

MFC

#### Library

Tensorflow, Pythorch, MatconvNet, OpenCV

### Publications (International)

[1] **W.-Y. Kang** and B.-T. Zhang, "Continual Learning with Generative Replay via Discriminative Variational Autoencoder", NIPS 2018 Workshop on Continual Learning.

[2] **W.-Y. Kang**, K.-H. Park, and B.-T. Zhang, "Extremely Sparse Deep Learning using Inception Modules with Dropfilters", International Conference on Document Analysis and Recognition 2017, November, 2017

[3] C.-H. Han, S.-W. Lee, Y.-J. Heo, **W.-Y. Kang**, J.-H. Jun, and B.-T. Zhang, "Criteria for Human-Compatible AI in Two-Player Vision-Language Tasks", IJCAI 2017 Workshop on LaCATODA, August, 2017

[4] C.-H. Han, Y.-J. Heo, **W.-Y. Kang**, J.-H. Jun, and B.-T. Zhang, "Attention Memory for Locating an Object through Visual Dialogue", CVPR 2017 Workshop on Video Questioning and answering, July, 2017

## Publications (Domestic)

- [1] **Wooyoung Kang** and Byoung-Tak Zhang, "Hangul Handwriting Recognition using Sparse Convolutional Neural Networks Based on Inception Modules with Dropfilter", KCC2017, June, 2017
- [2] Sang-Woo Lee, Cheolho Han, Yujung Heo, **Wooyoung Kang**, Jaehyun Jun, and Byoung-Tak Zhang, "Analyzing and Solving GuessWhat?!", KCC2017, June, 2017
- [3] Jaehyun Jun, **Wooyoung Kang,** Cheolho Han, Yujung Heo, and Byoung-Tak Zhang, "Goal-oriented Question Generator model using Attention for GuessWhat", KCC2017, June, 2017
- [4] **Wooyoung Kang** and Byoung-Tak Zhang, "Image Classification using Convolutional Neural Networks Based on Discriminative Features", KIISE, autumn conference 2016, December, 2016
- [5] Hwiyeol Jo, **Wooyoung Kang**, Dong-Sig Han, and Byoung-Tak Zhang, "Konvbot: Korean Conversational Model for Childcare", KIISE, autumn conference 2016, December, 2016
- [6] Sang-Woo Lee, Dong-Hyun Kwak, Kyoung-Woon On, Yujung Heo, **Wooyoung Kang**, Ceyda Cinarel, and Byoung-Tak Zhang, "Robust Scheduling based on Daily Activity Learning by using Markov Decision Process and Inverse Reinforcement Learning", KIISE, autumn conference 2016, December, 2016
- [7] **Wooyoung Kang**, Byoung-Hee Kim, and Byoung-Tak Zhang, "Hangeul Handwriting Recognition using Deeper Convolutional Neural Networks Based on Inception Modules", KCC2016, June, 2016
- [8] **Woo-Young Kang** and Hyo-Jong Lee, "Vehicle Model Recognition using Retinex Algorithm during Night-Time", The Institute of Electronics and Information Engineers, autumn conference, Poster Session, November, 2013"
- [9] **Woo-Young Kang** and Hyo-Jong Lee, "Development of Model Recognition Algorithm using CCTV Image", The Institute of Electronics and Information Engineers, summer conference, Poster Session, July, 2013:
- [10] **Woo-Young Kang**, Tae-Gyun Lee, Min-Ho Kwak, and Hyo-Jong Lee, "Development of Model Recognition Algorithm for Moving Vehicles", The Korean Institute of Information Scientists and Engineers, autumn conference, Poster Session, November, 2012;

#### Activities

- Club member, web programming, 2012 2014
- Elementary physics tutor from Chonbuk National University, March 2013 June 2013
- Signal corpsman, the Korea Army, April 2009 February 2011

### **Awards and Honors**

- Excellence Award for Master's Thesis, August 2017
- Ranked 2nd when graduation 2 / 83, August 2014
- Best paper awards from domestic conferences 3 times
- A citation from Regimental commander, December 2011
- Academic scholarships from Chonbuk National University
  - > Full tuition & fee for two semesters
  - > Half tuition & fee for three semesters
- National Grant Scholarships 4 times