Yookoon Park

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Education

Columbia University 2019 – present
Ph.D. Student. Computer Science.
Advisor: David Blei

Seoul National University 2017 – 2019
M. Sc. Student. Computer Science and Engineering.
Advisor: Gunhee Kim
GPA: 4.24 / 4.3

Seoul National University 2010 – 2016
B. Sc. Computer Science and Engineering & Statistics (Double Major).
GPA: 4.0 / 4.3. Summa Cum Laude.

Research

Seoul National University 2017 – 2019
M. Sc. Student and Research Assistant. Vision and Learning Lab.
Advisor: Gunhee Kim

- **Vairaiontal Laplace Autoencoders**
  We propose a novel framework for training deep generative models using the Laplace approximation in order to tackle the challenges in amortized variational inference.
  In ICML 2019 (lead author).
- **Conversation Modeling using Variational Autoencoders**
  We propose a hierarchical latent variable model and utterance drop regularization technique to tackle the *vanishing KL divergence* problem in RNN-VAE models for conversation modeling.
  In NAACL 2018, oral (lead author).
- **SplitNet: Learning Tree-like Neural Network Structures**
  We develop a novel group sparse weight regularization to split deep neural networks into tree-like layer structure for parameter reduction and model parallelization.
  In ICML 2017 (co-first author).

Seoul National University 2015 – 2016
Undergraduate Research Intern. Vision and Learning Lab.
Advisor: Gunhee Kim

Publications

Yookoon Park, Chris Dongjoo Kim, Gunhee Kim. **Variational Laplace autoencoders**. In *ICML, 2019*.
Paper :http://proceedings.mlr.press/v97/park19a/park19a.pdf
Code: http://vision.snu.ac.kr/projects/vlae

Yookoon Park, Jaemin Cho, Gunhee Kim. **A hierarchical latent structure for variational conversation modeling**. In *NAACL, 2018* (Oral).
Paper: http://aclweb.org/anthology/N18-1162
Code: http://vision.snu.ac.kr/projects/vhcr

Yookoon Park*, Juyong Kim*, Gunhee Kim, Sung Ju Hwang. **SplitNet: Learning to semantically split deep networks for parameter reduction and model parallelization**. In *ICML, 2017* (Oral and poster). (* equal contribution)
Paper: `http://proceedings.mlr.press/v70/kim17b/kim17b.pdf`
Code: `http://vision.snu.ac.kr/projects/splitnet`

Research Interests
Unsupervised Learning, Hierarchical Models and Variational Inference.
Machine Learning Applications in Computer Vision and Natural Language.

Honors

Kwanjeong Educational Foundation Abroad Graduate Student Scholarship.	2019 – present
Korea Foundation for Advanced Studies (KFAS) Graduate Student Scholarship. Full-tuition and fees.	2017 – 2018
National Science and Engineering Scholarship. Full-tuition and fees.	2010 – 2016

Teaching Assistant

SNU M1522.001000 Computer Vision	Spring 2018
SNU 4190.678 Natural Language Processing	Fall 2017
SNU 4190.101 Discrete Mathematics	Spring 2017

Programming Proficiency
Python, TensorFlow and Pytorch.

Military Service
52 Army Division Military Band, South Korea. 2013 – 2014