Yoonho Lee

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Education

POSTECH (Pohang University of Science and Technology) *Pohang, South Korea*

M.S. in Computer Science *Aug. 2016 - Aug. 2018*

- Advisor: Seungjin Choi
- Thesis: Gradient-Based Meta-Learning with Learned Layerwise Metric and Subspace [C1].

POSTECH (Pohang University of Science and Technology) *Pohang, South Korea*

B.S. in Mathematics *Mar. 2012 - Aug. 2016*

University of California, Berkeley *CA, United States*

Exchange Student, Mathematics Department *Aug. 2014 - Aug. 2015*

Sejong Science High School *Seoul, South Korea*

Specialized high school for talented students in math and science. Early graduation. *Mar. 2010 - Mar. 2012*

Publications

Peer-Reviewed Conference Papers

[C5] **Yoonho Lee**, Juho Lee, Sung Ju Hwang, Eunho Yang, and Seungjin Choi. *"Neural Complexity Measures".* 34th Conference on Neural Information Processing Systems (**NeurIPS 2020**)

[C4] Juho Lee*, **Yoonho Lee***, Jungtaek Kim, Eunho Yang, Sung Ju Hwang, and Yee Whye Teh. *"Bootstrapping Neural Processes".* 34th Conference on Neural Information Processing Systems (**NeurIPS 2020**)

[C3] Wonjae Kim and **Yoonho Lee**. *"Learning Dynamics of Attention: Human Prior for Interpretable Machine Reasoning".* 33rd Conference on Neural Information Processing Systems (**NeurIPS 2019**)

[C2] Juho Lee, **Yoonho Lee**, Jungtaek Kim, Adam Kosiorek, Seungjin Choi, and Yee Whye Teh. *"Set Transformer: A Framework for Attention-based Permutation-Invariant Neural Networks".* 36th International Conference on Machine Learning (**ICML 2019**)

[C1] **Yoonho Lee** and Seungjin Choi. *"Gradient-based meta-learning with learned layerwise metric and subspace".* 35th International Conference on Machine Learning (**ICML 2018**)

Peer-Reviewed Workshop Papers

[W1] Juho Lee, **Yoonho Lee**, and Yee Whye Teh. *"Deep Amortized Clustering ".* **Oral Presentation**, Sets and Partitions Workshop at **NeurIPS 2019**

Preprints

[P3] Ari Pakman, Yueqi Wang, **Yoonho Lee**, Pallab Basu, Juho Lee, Yee Whye Teh, Liam Paninski. *"Attentive Clustering Process".*

[P2] Minkyo Seo, **Yoonho Lee***, and Suha Kwak. *"On the Distribution of Penultimate Activations of Classification Networks".*

[P1] **Yoonho Lee**, Wonjae Kim, Wonpyo Park, and Seungjin Choi. *" Discrete Infomax Codes for Supervised Representation Learning".*

Industry Experience

AITRICS *Seoul, South Korea*

Research Scientist *Mar. 2020 - Present*

- Conducted research on meta-learning [C5] and probabilistic models [C4, P3].

Kakao Corporation *Pangyo, South Korea*

Research Scientist *Aug. 2018 - Mar. 2020*

- Conducted research on set-input networks [C2, W1], interpretable attention mechanisms [C3], regularization for meta-learning [P1], and efficient knowledge distillation [P2].

Naver Corporation *Jeongja, South Korea*

Research Intern *Mar. 2018 - Jun. 2018*

- Conducted research on meta-learning optimizers.

Awards & Honors

Scholarships

Doctoral Study Abroad Fellowship Aug. 2021 -

Full-tuition scholarship with stipend for graduate studies abroad, Korea Foundation for Advanced Studies (KFAS)

Korean Presidential Science Scholarship Mar. 2012 - Mar. 2016

Full-tuition scholarship with stipend for undergraduate studies, Korea Student Aid Foundation

Awards

Outstanding Reviewer, Conference on Neural Information Processing Systems (NeurIPS) 2019

Travel Award, International Conference on Machine Learning (ICML) 2018

Silver medal, Korean Mathematical Olympiad (KMO), High-school Division 2010

Gold medal, Korean Mathematical Olympiad (KMO), Middle-school Division 2008

Teaching Experience

Teaching Assistant, Deep Learning Course, POSCO Group Mar. 2017 - Jun. 2018

Teaching Assistant, Business ML Course, Samsung Electronics Device Solutions Sep. 2017 - Dec. 2017

Teaching Assistant, AI Job Training Course, POSTECH Institute of AI Mar. 2017 - Jun. 2017

Teaching Assistant, CSED101 (Programming and Problem Solving), POSTECH Mar. 2017 - Jun. 2017

Reviewing Services

Advances in Neural Information Processing Systems (NeurIPS) 2018 - 2020

International Conference on Machine Learning (ICML) 2019 - 2020

International Conference on Learning Representations (ICLR) 2021

International Conference on Artificial Intelligence and Statistics (AISTATS) 2019 - 2021

International Joint Conferences on Artificial Intelligence (IJCAI) 2019 - 2020

Asian Conference on Machine Learning (ACML) 2019 - 2020

Relevant Coursework

Math (upper undergrad level) Modern Algebra 1/2, Analysis 1/2, Intro to Geometry, Intro to Number Theory, Intro to Numerical Analysis, General Topology

Math (graduate level) Algebra 1, Algebraic Topology, Homological Algebra, Probability Theory, Theory of Functions of Complex Variables, Metamathematics

Computer Science Automata and Formal Languages, Data Analysis Using Tools, Computational Geometry, Pattern Recognition, Machine Learning, Deep Learning for Visual Recognition, Linguistics Basics for Natural Language Processing, Vision and Language

Skills

Languages Python, LaTeX, Matlab, C, C++, Java

Frameworks PyTorch, TensorFlow, NumPy, SciPy, Pandas, Seaborn

TOEFL Scores 114 (Reading 30, Listening 29, Speaking 28, Writing 27)

GRE Scores Verbal 167 (95%), Quantitative 169 (94%), Analytical Writing 5.0 (92%)