

윤 응구

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Daejeon, Korea

2021. 03 - 2023. 02

Graduate School of Al

M.S. in Artificial Intelligence

• Supervisor: Prof. Juho Lee

• Lab: Statistical Inference and Machine Learning Lab (SIML)

• Thesis: Traversing Between Modes in Function Space for Fast Ensembling

• Research interests: Loss landscape, Neural processes

• GPA: 4.08 / 4.3

SungKyunKwan University (SKKU)

Seoul, Korea

Department of Computer Science and Engineering, College of Computing

B.S. in Computer Science and Engineering

Total GPA: 4.33 / 4.5Major GPA: 4.47 / 4.5

2017. 03 – 2020. 08

EXPERIENCE

Artificial Intelligence Institute of Seoul National University (AIIS)

Seoul, Korea

2020. 07 - 2020. 09

Deep Representation Learning Research Group (DRL)

Research Intern

- Supervisor: Prof. Wonjong Rhee
- Research on model interpretability and activation on-off patterns.
- Reproduce CNN visualization methods, including Grad-CAM, (C)LRP, etc.

Electronics and Telecommunications Research Institute (ETRI)

Daejeon, Korea

Artificial Intelligence Research Laboratory

2020. 01 - 2020. 02

Research Intern

- Supervisor: Yoo-mi Park
- Test and debug ETRI Deep Learning HPC Platform Dashboard.
- Implement AlexNet and ResNet models with DL-MDL to serve as example deep learning models.

AWARDS & HONORS

The National Scholarship for Science and Engineering

2019 Spring – 2020 Spring

Korea Student Aid Foundation (KOSAF)

• Supports undergraduates with strong academic performance in science and engineering.

SungKyun Software Scholarship

2017 Spring – 2018 Fall

1

SungKyunKwan University (SKKU)

• Supports students with an outstanding GPA.

Dean's List Award 2017 Spring – 2019 Fall

College of Computing, SungKyunKwan University (SKKU)

• In recognition of high scholastic achievement. (6 times)

Update: 2023. 02. 06

PUBLICATIONS

PREPRINT

Probabilistic Imputation for Time-series Classification with Missing Data

SeungHyun Kim*, Hyunsu Kim*, **Eunggu Yun***, Hwangrae Lee, Jaehun Lee, Juho Lee (*: Equal contribution)

2023

Traversing Between Modes in Function Space for Fast Ensembling

Eunggu Yun*, Hyungi Lee*, Giung Nam*, Juho Lee (*: Equal contribution)

2023

CONFERENCE

Martingale Posterior Neural Processes

ICLR (Spotlight)

Hyungi Lee, **Eunggu Yun**, Giung Nam, Edwin Fong, Juho Lee

2023

Scale Mixtures of Neural Network Gaussian Processes

Hyungi Lee, **Eunggu Yun**, Hongseok Yang, Juho Lee

ICLR 2022

JOURNAL

Benefits of stochastic weight averaging in developing neural network radiation scheme for numerical weather prediction

JAMES

Hwan-Jin Song, Soonyoung Roh, Juho Lee, Giung Nam, **Eunggu Yun**, Jongmin Yoon, Park Sa Kim

2022

PROJECTS

Bayesian inference for time-series data with missing values

2022. 08 - 2023. 02

Samsung Research

- · Developing a Bayesian deep learning method that can quantify uncertainty within missing values.
- Propose multivariate time-series classification model using a regularization method called ObsDropout.
- Validate proposed method on PhysioNet 2012, MIMIC-III, and UCI human activity datasets.

Developing artificial intelligence based emulator for physics processes in numerical models

2021. 05 - 2022. 07

National Institute of Meteorological Sciences (NIMS)

• Research on the developing alternative techniques of physical processes in the numerical weather prediction (NWP) model based on AI to reduce computational costs and to improve the accuracy of NWP.

SOFTWARE

Neural-Process-Family (NPF)

202.

Neural Process implementations in JAX

SKILLS

Programming Python, JavaScript, C, C++, LaTeX

Deep Learning PyTorch (+ PyTorch/XLA), JAX (+ Flax, Optax), TensorFlow (+ Keras)

System Linux, Docker, Google Cloud Platform (+ TPU)

Languages Korean (native), English (intermediate)

Update: 2023. 02. 06 2