

Han-seul Cho

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Research interests

Any topics that applies mathematics beyond mathematics.

For example, AI/ML, deep learning, nonconvex optimization, large batch training, human-AI interaction, natural language processing(want to learn more later), statistical inference & prediction, (biomedical) imaging, etc.

Education

KAIST

Daejeon, Republic of Korea

Undergraduate

Mar. 2017 – Feb. 2022(expected)

Major in Mathematical Sciences

Minor in Computer Sciences

Credits Completed: 153

GPA: 4.05/4.3 (97.11%)

University of Twente

Enschede, Netherlands

Exchange Student

Feb. 2020 – Jul. 2020

Major in Applied Mathematics

Grade: 9/10

Incheon Science High School

Incheon, Republic of Korea

Early Graduation

Mar. 2015 – Feb. 2017

Research experience

KAIST 2021 Post-AI research project

May 2021 – Dec. 2021(Expected)

Project name: “Research on ‘AI-augmented Organizations’ of Collaborative Decision Making and Learning”

Principal Investigator: Sangyoon Yi (SOIL Lab, Grad. School of Future Strategy, KAIST)

Collaborative Researcher & Advisor: Jinkyoo Park (Systems Intelligence Lab, Industrial & Systems Eng., KAIST)

Algorithmic Intelligence Laboratory

Individual Study

Mar. 2021 – Jun. 2021

Advisor: Jinwoo Shin (Grad. School of AI / Electrical Eng., KAIST)

Studied about optimizers for ‘large batch training’ such as LARS and LAMB; (informally) proposed two optimizers ‘LGC’ and ‘LaRSPaG’ combining the idea(s) of LARS and Gradient Clipping

Refer to the following [Github link](#).

Bio Imaging, Signal Processing and Learning Lab

Individual Study

Sep. 2020 – Feb. 2021

Advisor: Jong-chul Ye (Bio and Brain Eng., KAIST)

Assignment: Semantic Segmentation of Kidney Tumor with U-Net (KiTS19 Challenge); test dice of kidney has reached ≥ 0.93

Statistics Lab

Individual Study

Jul. 2020 – Aug. 2020

Advisor: Yeon-seung Chung (Mathematics, KAIST)

Read and self-studied the book '*An Introduction to Statistical Learning* (Springer)' (Chap. 1–5)

Clinical Neuroscience & Development Lab

Pre-URP Program (as a high school student)

Jan. 2016

Advisor: Bum-seok Jeong (Medical Sci. and. Eng., KAIST)

Participated in a research project "Finding reliable biomarkers related with distraction of voluntary attention"

Honors and scholarships

Dean's List (The School of Freshman, KAIST)

Fall, 2017

The National Scholarship for Science and Engineering (Korea Student Aid Foundation)

2017 – 2020

Skills

Programming

Experienced: Python, Pytorch, Matlab.

Have ever used once: C, C++, R, Scalar