Taehyung Kwon

taehyung.kwon@kaist.ac.kr | https://kbrother.github.io/ | kbrother

Education

KAIST *Seoul, South Korea*

M.S. in Artificial Intelligence Mar. 2020 - Feb. 2022

KAIST Data Mining Lab, Advisor: Kijung Shin

KAIST *Daejeon, South Korea*

B.S. in School of Computing Mar. 2015 - Feb. 2020

GPA: 4.0/4.3, Major GPA: 4.0/4.3, **Summa Cum Laude**

Publications

[1] **TensorCodec: Compact Lossy Compression of Tensors without Strong Data Assumptions (to appear)**
Taehyung Kwon, Jihoon Ko, Jinhong Jung, and Kijung Shin.
IEEE ICDM 23.

[2] **NeuKron: Constant-Size Lossy Compression of Sparse Reorderable Matrices and Tensors**
Taehyung Kwon*, Jihoon Ko*, Jinhong Jung, and Kijung Shin.
ACM WWW 23. [Link]

[3] **Finding a Concise, Precise, and Exhaustive Set of Near Bi-Cliques in Dynamic Graphs**
Hyeonjeong Shin, **Taehyung Kwon**, Neil Shah, and Kijung Shin.
ACM WSDM 22. [Link]

[4] **Learning to Pool in Graph Neural Networks for Extrapolation**
Jihoon Ko, **Taehyung Kwon**, Kijung Shin, and Juho Lee.
CoRR abs/2106.06210. *Preprint* [Link]

[5] **Slicenstitch: Continuous CP Decomposition of Sparse Tensor Streams**
Taehyung Kwon*, Inkyu Park*, Dongjin Lee, and Kijung Shin.
IEEE ICDE 21. [Link]

Projects

Development of the Platform for Safety from Disasters *Ministry of Science and ICT*

Researcher Dec. 2019 - Aug. 2022

- I developed the algorithm for removing anomalies and imputing missing values of sensor data in real time. The method is based on the online tensor decomposition algorithm.

Robust, Fair, and Scalable Data-driven Continual Learning *Ministry of Science and ICT*

Researcher Sep. 2022 -

- I am developing a novel continual learning algorithm for graph neural networks.

Awards and Honors

2017 - 2018 **The National Scholarship for Science and Engineering**

2015 **Dean's List**

Technical Skills

Programming C, C++, Matlab, Python

Drawing & Typesetting Office, LaTeX

Languages Korean (Native), English

TEACHING

Teaching Assistant

KAIST

- AI607 Graph Mining and Social Network Analysis — Fall 2020, Fall 2021, Fall 2022
- AI506 Data Mining and Search — Spring 2020, Spring 2021, Spring 2022