

# Taehyung Kwon

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## Education

### KAIST

M.S. in Artificial Intelligence

KAIST Data Mining Lab, Advisor: Kijung Shin

Seoul, South Korea

Mar. 2020 - Feb. 2022

### KAIST

B.S. in School of Computing

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

Daejeon, South Korea

Mar. 2015 - Feb. 2020

## 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<sup>\*</sup>, Jihoon Ko<sup>\*</sup>, 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<sup>\*</sup>, Inkyu Park<sup>\*</sup>, 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, L<sup>A</sup>T<sub>E</sub>X

### Languages

Korean (Native), English

## TEACHING

### Teaching Assistant

KAIST

- AI607 Graph Mining and Social Network Analysis
- AI506 Data Mining and Search

Fall 2020, Fall 2021, Fall 2022

Spring 2020, Spring 2021, Spring 2022