Jun-Gi Jang

CONTACT

Data Mining Laboratory
Building 301 #551-1
Seoul National University
1, Gwanak-ro, Gwanak-gu, Seoul
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Homepage: https://jungijang.github.io/

EDUCATION

M.S/Ph.D Student

MAR. 2017 - PRESENT

Phone: +82-2-880-7263

Email: elnino4 (at) snu.ac.kr

Computer Science and Engineering Seoul National University

Advisor: U Kang

Bachelor of Science

MAR. 2010 - FEB. 2017

Mechanical and Aerospace Engineering,

Computer Science and Engineering (double major)

Seoul National University

RESEARCH INTERESTS

Tensor Analysis, Time Series Analysis

PUBLICATIONS

Conferences

- C5. **Jun-Gi Jang** and U Kang, "Fast and Memory-Efficient Tucker Decomposition for Answering Diverse Time Range Queries", The 27th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2021, Virtual Event. Best Paper Award, Best Research Paper.
- C4. Yong-chan Park, **Jun-Gi Jang**, and U Kang, "Fast and Accurate Partial Fourier Transform for Time Series Data", The 27th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD), 2021, Virtual Event.
- C3. Moonjeong Park*, **Jun-Gi Jang***, and Lee Sael, "VEST: Very Sparse Tucker Factorization of Large-Scale Tensors", IEEE International Conference on Big Data and Smart Computing (BigComp), 2021, Online. (* equal contribution)

 Best Paper Award, 1st Place.
- C2. **Jun-Gi Jang** and U Kang, "D-Tucker: Fast and Memory-Efficient Tucker Decomposition for Dense Tensors", 36th IEEE International Conference on Data Engineering (ICDE), 2020, Online.
- C1. **Jun-Gi Jang**, Donjin Choi, Jinhong Jung, and U Kang, "Zoom-SVD: Fast and Memory Efficient Method for Extracting Key Patterns in an Arbitrary Time Range", ACM International Conference on Information and Knowledge Management (CIKM), 2018, Lingotto, Turin, Italy.

Journals

- J2. Dongjin Choi, Jun-Gi Jang, and U Kang, "S3CMTF: Fast, accurate, and scalable method for incomplete coupled matrix-tensor factorization", PLOS ONE, June 28, 2019. [Paper link]
- J1. Sejoon Oh, Namyong Park, **Jun-Gi Jang**, Lee Sael, and U Kang, "High-Performance Tucker Factorization on Heterogeneous Platforms", IEEE Transactions on Parallel and Distributed Systems, Apr. 1, 2019. [Paper link]

PATENTS	Patents

- P6. Jun-Gi Jang and U Kang, Apparatus and Method for Tensor Analysis (filed on Jul. 2021).
- P5. Yongchan Park, Jun-Gi Jang and U Kang, Fast Partial Fourier Transform Method and Computing Apparatus for Performing the Same (filed on Apr. 2021).
- P4. Dawon Ahn, Jun-Gi Jang and U Kang, Method for Tensor Decomposition with Temporal Dependency and Apparatus Therefor (filed on Mar. 2021).
- P3. Jun-Gi Jang and U Kang, Method for Decomposing Tensor and Apparatus for Performing the Same (filed on Sep. 2020).
- P2. Donjing Choi, Jun-Gi Jang, and U Kang, Data Analysis Method and Apparatus for Sparse Data (registered on Mar. 2020).
- P1. Jun-Gi Jang, Dongjin Choi, and U Kang, Apparatus and Method for Processing Data (registered on Jan. 2020).

AWARDS & HONORS Best Paper Award, Best Research Paper, KDD

2021

Best Paper Award, 1st Place, BigComp

2021

Lecture/Research Scholarship, Seoul National University MAR. 2019 - PRESENT

M1522.001600 Topics in Big data Analytics @ SNU

Humantech Paper Award (Honorable Mention, lead-author), Samsung

FEB. 2018

SPRING 2017

Work EXPERIENCE

Research Intern, HYPERCONNECT

Jul. 2020 - Aug. 2020

TALKS

Talks

1. Zoom-SVD: Fast and Memory Efficient Method for Extracting Key Patterns in an Arbitrary Time Range, NC Soft, Jan. 2019

TEACHING EXPERIENCE

Lead T.A., M2177.004900 Theory and Lab of IoT, AI, and Big Data @ SNU	SPRING 2020
T.A., M2177.004900 Theory and Lab of IoT, AI, and Big Data @ SNU	FALL 2019
T.A., M2177.004900 Theory and Lab of IoT, AI, and Big Data @ SNU	SPRING 2019
T.A., M1522.001400 Introduction to Data Mining @ SNU	SPRING 2018
T.A., M1522.000900 Data Structure @ SNU	FALL 2017
M2177.003000 Advanced Data Mining @ SNU	FALL 2019

GRADUATE Coursework

1.A., W11322.000900 Data Structure & Sivo	TALL 2017	
M2177.003000 Advanced Data Mining @ SNU	FALL 2019	
4190.676 Artificial Neural Networks @ SNU	FALL 2019	
3394.506 Advanced Numerical Linear Algebra @ SNU	Spring 2019	
M1522.002500 Quantum Computing and Information Fundamentals @ SNU	Spring 2019	
430.502 Industrial Applications of Electrical and Electronic Technologies @ SNU FALL 2018		
430.709A Convex Optimization @ SNU	FALL 2018	
4190.771 Topics in Algorithms (ML algorithms in bioinformatics) @ SNU	FALL 2018	
430.707A Pattern Recognition @ SNU	Spring 2018	
4190.771 Topics in Algorithms (Compression) @ SNU	Spring 2018	
M1522.001600 Topics in Big data Analytics @ SNU	FALL 2017	
M1522.000500 Information Visualization and Visual Analytics @ SNU	FALL 2017	
430.707A Advance Databases @ SNU	Spring 2017	