

Seungbum Jo

Assistant Professor

Division of Computer Convergence

Chungnam National University

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Research Interests

- Algorithms and Data structures: Space-efficient data structures and algorithms, sorting and selection problems, algorithm engineering, etc.

Education

Ph.D in Computer Science and Engineering	2011.03 – 2016.02
Seoul National University (Advisor : Srinivasa Rao Satti)	
<i>Thesis : Space Efficient Encodings for Bit-strings, Range Queries and Related Problems</i>	
MS in Computer Science	2009.03 – 2011.02
KAIST (Advisor : Kyung-Yong Chwa)	
<i>Thesis : Iterated local search for vertex coloring (In Korean)</i>	
BS in Computer Science and Mathematical Science	2005.03 – 2009.02
KAIST	

Work experience

Assistant Professor	2021.09 – current
Chungnam National University	
Assistant Professor	2019.09 – 2021.08
Chungbuk National University	
Postdoctoral Researcher	2019.04 – 2019.08
Université libre de Bruxelles (Advisor : John Iacono)	
Postdoctoral Researcher	2016.04 – 2019.03
University of Siegen (Advisor : Markus Lohrey)	
Visiting Postdoctoral Researcher	2018.01 – 2018.06
University of Haifa (Advisor : Shay Mozes and Oren Weimann)	
Internship	2007.06 – 2007.08
Electronics and Telecommunications Research Institute (ETRI), Rendering Team	

Publications (Peer-reviewed)

DBLP <https://dblp.uni-trier.de/pid/133/2068.html>

Google Scholar https://scholar.google.co.kr/citations?user=-syA_88AAAAJ

Talks and Posters

Succinct Encodings for Families of Interval Graphs

CTW 2019

Encoding two-dimensional range top- k queries revisited

WCTA 2018

Approximate Query Processing over Static Sets and Sliding Windows

WAAC 2018

Improved Space-efficient Linear Time Algorithms for Some Classical Graph Problems

CTW 2017

Compressed Bit Vectors Based on Variable-to-Fixed Encodings

WCTA 2018

Compressed Bit Vectors Based on Variable-to-Fixed Encodings

(with Stelios Joannou, Daisuke Okanohara, Rajeev Raman and Srinivasa Rao Satti)

DCC 2014 poster

Research Grants (as principal investigator)

Design and implementation of data structures for various queries on Graphs with bounded width parameters

Granted by National Research Foundation of Korea (NRF)

2020.09 – 2023.08

Design of Space-Efficient data structures for various graph classes

Granted by Chungbuk National University

2019.09 – 2021.02

Teaching Experience

Teaching: Algorithms, Data structures, Basic Python, Linear Algebra, Discrete mathematics, Probability and Statistics

Teaching Assistant (at KAIST and SNU): Problem Solving, Data Structures, Computer Programming

Personal Service

PC member: ISAAC 2022

Reviewer: Algorithmica, Information and Computation, Theoretical Computer Science, Theory of Computing Systems, The Computer Journal, IEEE Access

Subreviewer: CPM, FCT, ISAAC, MFCS, SPIRE, WADS

Others ACM-ICPC Korea Site Judge (2020-2023), ACM-ICPC Korea Site staff (2009 - 2011)

Students

Geunho Kim: Undergraduate intern (2021.01 - 2022.12)

Reference

References available upon request.