

# Jaehui Park

Department of Statistics  
University of Seoul  
163 Seoulsiripdae-ro, Dongdaemun-gu, Seoul 02504, Korea

Phone: +82-2-6490-2630  
Fax: +82-2-6490-2629  
Email: jaehui@uos.ac.kr

## **RESEARCH INTERESTS**

**Databases** – Rankings in (semi-)structured data, Keyword query optimization

**Data mining** – Graph data mining, Social network analysis, Similarity join

**Information Retrieval** – Multidimensional recommendation, Top-k query processing

**Machine Learning** – Distributed machine learning algorithms, Deep learning, Language model

**IT Convergence** – Industrial data management, Knowledge distribution framework, Linked data

## **EDUCATION**

- 2012      **Ph.D.**, Computer Science and Engineering, Seoul National University, Seoul, Korea  
Dissertation: A Graph-based Framework for Processing Keyword Queries over Relational Databases (Advisor: Sang-goo Lee)
- 2008      **M.S.**, Computer Science and Engineering, Seoul National University, Seoul, Korea
- 2005      **B.S.**, Computer Science, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea

## **ACADEMIC AND RESEARCH EXPERIENCE**

- Mar. 2022-present      Associate Professor, University of Seoul
- Mar. 2020-Feb. 2022      Assistant Professor, University of Seoul
- Mar. 2018-Feb. 2020      Assistant Professor, Incheon National University
- Sep. 2012- Feb. 2018      Research Engineer, Electronics and Telecommunications Research Institute (ETRI)
- Mar.-Aug. 2012      Postdoctoral Fellow, Institute of Computer Technology, Seoul National University
- Dec. 2007-Feb. 2008      Research Intern, National Institute of Informatics, Tokyo, Japan
- 2009      Teaching Assistant, Database and Advanced Database, Seoul National University
- 2008      Teaching Assistant, Semantic Data Processing and Topics in Databases, Seoul National University

## **AWARDS AND HONORS**

- 2006-2011    **Brain Korea 21 Fellowship**, Korea Ministry of Education and Human Resources Development
- 2007-2011    **Samsung Electronics Fellowship**, Samsung Electronics
- 2011            **Outstanding Research Award**, Brain Korea 21 Information Technology at Seoul National University
- 2006-2009    **Research Fellowship**, Seoul National University

## **PUBLICATIONS**

### **REFEREED JOURNALS**

1. Soyun Shin, **Jaehui Park** and Moonwook Ryu. 2023. Integrating Heterogeneous Graphs Using Graph Transformer Encoder for Solving Math Word Problems. IEEE ACCESS, Volume 11, pp. 27609-27619
2. Yeonchan Ahn, Sang-goo Lee, Junho Shim and **Jaehui Park**. 2022. Retrieval-Augmented Response Generation for Knowledge-Grounded Conversation in the Wild. IEEE ACCESS, Volume 10, pp. 131374-131385
3. Yeonchan Ahn, Sang-goo Lee and **Jaehui Park**. 2020. Exploiting Text Matching Techniques for Knowledge-Grounded Conversation. IEEE ACCESS, Volume 8, pp. 126201-126214
4. Jae-won Lee and **Jaehui Park**. 2019. An Approach to Constructing a Knowledge Graph Based on Korean Open-Government Data. Applied Sciences, Volume 9(19), pp. 4095-4107
5. **Jaehui Park**. 2019. Selectively Connected Self-Attentions for Semantic Role Labeling. Applied Sciences, Volume 9(8), pp. 1716-1731
6. **Jaehui Park** and Sang-goo Lee. 2016. Finding Top-k Answers in Node Proximity Search using Distribution State Transition Graph. ETRI Journal (ETRIJ), Volume 38(4), pp. 714-723
7. **Jaehui Park** and Sang-goo Lee. 2014. A Graph-theoretic Approach to Optimize Keyword Queries in Relational Databases. Knowledge and Information Systems (KAIS), Volume 41(3), pp. 843-870
8. **Jaehui Park** and Sang-goo Lee. 2013. Correlation-based Ranking over Relational Databases. INFORMATION-An International Interdisciplinary Journal, Volume 16, Issue 6(B), pp. 4175-4191
9. **Jaehui Park** and Sang-goo Lee. 2013. Pragmatic Correlation Analysis for Probabilistic Ranking over Relational Data. Expert Systems with Applications (ESWA), Volume 40(7), pp. 2649-2658
10. Dongjoo Lee, **Jaehui Park**, Junho Shim and Sang-goo Lee. 2011. Efficient Filtering Techniques for Cosine Similarity Joins, INFORMATION-An International Interdisciplinary Journal, Volume 14, pp. 1265-1276
11. **Jaehui Park** and Sang-goo Lee. 2011. Keyword Search in Relational Databases, Knowledge and Information Systems (KAIS), Volume 26(2), pp. 175-193

### **REFEREED CONFERENCES**

12. **Jaehui Park** and Su-young Chi. 2015. A Requirement for Traceability of Production Logs in Large-scale Shop Floor Data. Proceedings of the International Conference on Big Data Applications and Services (BigDas'15), pp. 128-132
13. **Jaehui Park** and Su-young Chi. 2015. An Approach to Highly Available and Extensible Data Management Systems for Large Scale Factory Floor Data. Proceedings of the International Conference on Data Analytics (DATAANALYTICS'15), pp. 74-77
14. **Jaehui Park** and Sang-goo Lee. 2014. Efficiently Processing of Top-k Typicality Query for Structured Data. Proceedings of the International Conference on Database Management Systems (DMS'14), pp. 391-401
15. **Jaehui Park** and Yunkyung Park. 2013. Social Interaction Propensity Model using Information Entropy. Proceedings of the International Conference on Social Computing and Its Applications (SCA'13), pp. 283-289
16. Jongheum Yeon, Dongjoo Lee, **Jaehui Park**, Sang-goo Lee. 2012. A Framework for Sentiment Analysis on Smartphone Application Stores. Proceedings of the International Conference on Advanced Information Technology and Sensor Application (ATIS'12), pp. 1-12
17. **Jaehui Park** and Sang-goo Lee. 2011. Exploiting correlation to rank database query results. In Proceedings of the International Conference on Database Systems for Advanced Applications (DASFAA'11), pp. 296-305
18. **Jaehui Park** and Sang-goo Lee. 2010. Ranking objects based on attribute value correlation. In Proceedings of the International Conference on Database and Expert Systems Applications (DEXA'10), pp. 346-359
19. **Jaehui Park** and Sang-goo Lee. 2010. Probabilistic ranking for relational databases based on correlations. In Proceedings of the workshop on Ph.D. students in Information and Knowledge Management (PIKM '10), pp. 79-82
20. Dongjoo Lee, **Jaehui Park**, Junho Shim and Sang-goo Lee. 2010. An Efficient Similarity Join Algorithm with Cosine Similarity Predicate. In Proceedings of the International Conference on Database and Expert Systems Applications (DEXA'10), pp. 422-436
21. **Jaehui Park** and Sang-goo Lee. 2009. Approximating Retrieval Unit for Un-structured Querying in Relational Databases, In Proceedings of the International Conference on Emerging Databases (EDB'09), pp. 423-430
22. **Jaehui Park**, Tomohiro Fukuhara, Ikki Ohmukai, Hideaki Takeda and Sang-goo Lee. 2008. Web content summarization using social bookmarks: a new approach for social summarization. In Proceeding of the workshop on Web Information and Data Management (WIDM '08), pp. 103-110
23. **Jaehui Park**, Sang-goo Lee and Jonghoon Chun. 2007. A Wiki-System with Integrity Support for Structured Data, In Proceedings of the International Conference on Information Society (ICIS'07), pp. 378-383

#### OTHER PUBLICATIONS

24. **Jaehui Park**, Tomohiro Fukuhara and Hideaki Takeda. 2008. Web Content Summarization Using Social Bookmarking Service, NII Technical Report, pp. 1-7