

SEONGKU KANG

Email: seongku@postech.ac.kr, Phone: +82 10-8559-7284, [Google Scholar](#), [GitHub](#)

EDUCATION

POSTECH, Pohang, South Korea Mar 2018 - Present

- Ph.D. in Computer Science and Engineering
 - Thesis: Knowledge Distillation Approaches for Accurate and Efficient Recommender System
 - Advisor: [Prof. Hwanjo Yu](#)
 - Focus: Model compression, Knowledge distillation, Recommender system

Nanyang Technological University, Singapore Jul 2016 - May 2017

- B.S. in Computer Science and Engineering
 - Exchange Student

Hanyang University, Seoul, South Korea Mar 2012 - Feb 2018

- B.S. in Computer Science and Engineering
 - Cumulative GPA: 4.43/4.50 (ranked 1st in CSE Dept.).

EXPERIENCE

Microsoft Research, Beijing, China May 2022 - Present

- Research intern in Social Computing group
 - Focus: Information retrieval, Retrieval efficiency, Unbiased learning
 - Mentor: [Dr. Xing Xie](#), [Dr. Jianxun Lian](#)

PUBLICATIONS

CONFERENCES

- C15 Distillation from Heterogeneous Models for Top-K Recommendation
SeongKu Kang, Wonbin Kweon, Dongha Lee, Jianxun Lian, Xing Xie, Hwanjo Yu
ACM The Web Conference (**WWW 2023**)
- C14 Learning Topology-Specific Experts for Molecular Property Prediction
Suyeon Kim, Dongha Lee, **SeongKu Kang**, Seonghyeon Lee, Hwanjo Yu
AAAI Conference on Artificial Intelligence (**AAAI 2023**)
- C13 Consensus Learning from Heterogeneous Objectives for One-Class Collaborative Filtering
SeongKu Kang, Dongha Lee, Wonbin Kweon, Junyoung Hwang, Hwanjo Yu
ACM The Web Conference (**WWW 2022**)
- C12 TaxoCom: Topic Taxonomy Completion with Hierarchical Discovery of Novel Topic Clusters
Dongha Lee, Jiaming Shen, **SeongKu Kang**, Susik Yoon, Jiawei Han, Hwanjo Yu
ACM The Web Conference (**WWW 2022**)
- C11 Obtaining Calibrated Probabilities with Personalized Ranking Models
Wonbin Kweon, **SeongKu Kang**, Hwanjo Yu
AAAI Conference on Artificial Intelligence (**AAAI 2022, oral presentation**)
- C10 Topology Distillation for Recommender System
SeongKu Kang, Junyoung Hwang, Wonbin Kweon, Hwanjo Yu
ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD 2021**)

- C9 Bootstrapping User and Item Representations for One-Class Collaborative Filtering
Dongha Lee, **SeongKu Kang**, Hyunjun Ju, Chanyoung Park, Hwanjo Yu
ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR 2021**)
- C8 Unsupervised Proxy Selection for Session-based Recommender Systems
Junsu Cho, **SeongKu Kang**, Dongmin Hyun, Hwanjo Yu
ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR 2021**)
- C7 Learning Heterogeneous Temporal Patterns of User Preference for Timely Recommendation
Junsu Cho, Dongmin Hyun, **SeongKu Kang**, Hwanjo Yu
ACM International World-Wide Web Conference (**WWW 2021**)
- C6 Bidirectional Distillation for Top-K Recommender System
Wonbin Kweon, **SeongKu Kang**, Hwanjo Yu
ACM International World-Wide Web Conference (**WWW 2021**)
- C5 DE-RRD: A Knowledge Distillation Framework for Recommender System
SeongKu Kang, Junyoung Hwang, Wonbin Kweon, Hwanjo Yu
ACM International Conference on Information and Knowledge Management (**CIKM 2020**)
- C4 Deep Rating Elicitation for New Users in Collaborative Filtering
Wonbin Kweon, **SeongKu Kang**, Junyoung Hwang, Hwanjo Yu
ACM International World-Wide Web Conference (**WWW 2020**)
- C3 Multi-Modal Component Embedding for Fake News Detection
SeongKu Kang, Junyoung Hwang, Hwanjo Yu
IEEE International Conf. Ubiquitous Information Management and Communication (**IMCOM 2020**)
- C2 Semi-Supervised Learning for Cross-Domain Recommendation to Cold-start Users
SeongKu Kang, Junyoung Hwang, Dongha Lee, Hwanjo Yu
ACM International Conference on Information and Knowledge Management (**CIKM 2019**)
- C1 Densifying a Trust Network for Effective Collaborative Filtering
SeongKu Kang, Jemin Wang, Yeon-Chang Lee, Sang-Wook Kim
Korean DataBase Conference (**KDBC 2017**, Best Paper Award)

JOURNALS

- J3 Mitigating viewpoint sensitivity of self-supervised one-class classifiers
Hyunjun Ju, Dongha Lee, **SeongKu Kang**, Hwanjo Yu
Information Sciences (SCI) (2022.09)
- J2 Personalized Knowledge Distillation for Recommender System
SeongKu Kang, Dongha Lee, Wonbin Kweon, Hwanjo Yu
Knowledge-Based Systems (SCI) (2022.03)
- J1 Item-side Ranking Regularized Distillation for Recommender System
SeongKu Kang, Junyoung Hwang, Wonbin Kweon, Hwanjo Yu
Information Sciences (SCI) (2021.11)

AWARDS & SCHOLARSHIPS

POSTECHIAN Fellowship	POSTECH, 2022
POSTECH Research Award (4th place)	National Research Foundation, Korea, 2022
■ Awarded to outstanding research outcome in POSTECH	
Naver Ph.D Fellowship	Naver, 2021
■ Awarded to outstanding Ph.D students majoring in computer science in Korea	

Music Playlist Recommendation Competition (3rd place)	Kakao, 2020
SIGIR Student Travel Award	ACM SIGIR, 2019-2020
Dean's List	Hanyang University, 2018
Best Paper Award (3rd place)	Korean Database Conference (KDBC), 2017
NAVER Academic Scholarship	Naver, 2017
Hanyang Brain Scholarship	Hanyang University, 2012
National Science and Technology Scholarship	Ministry of Education, Korea, 2012-2017