

HAEKYU PARK

CONTACT

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RESEARCH INTERESTS

Machine Learning, Interpretable Machine Learning, Data Mining, Graph Data Mining

EDUCATION

Ph.D., Computer Science	Aug 2018 - Present
Georgia Institute of Technology, Atlanta, GA	
Advisor: Dr. Polo Chau	
B.S., Computer Science and Engineering	Mar 2012 - Aug 2017
Seoul National University, Seoul, Republic of Korea, Graduated with honors (Cum Laude)	
Advisor: Dr. U Kang	

WORK EXPERIENCE

Graduate Research Assistant	Aug 2018 - Present
Advisor: Dr. Polo Chau	
Georgia Institute of Technology	
Research Intern	June 2016 - May 2018
Advisor: Dr. U Kang	
Data Minig Lab at Seoul National University	

PUBLICATIONS

1. Junghwan Kim, [Haekyu Park](#), Ji-Eun Lee, and U Kang, **SIDE: Representation Learning in Signed Directed Networks**, The Web Conference (Previously known as WWW, World Wide Web Conference) 2018.
2. [Haekyu Park](#), Hyunsik Jeon, Junghwan Kim, Beunguk Ahn, and U Kang, **UniWalk: Explainable and Accurate Recommendation for Rating and Network Data**, Arxiv
3. [Haekyu Park](#), Jinhong Jung, and U Kang, **A Comparative Study of Matrix Factorization and Random Walk with Restart in Recommender Systems**, IEEE International Conference on Big Data (BigData), 2017.

PROJECTS

1. **Recommender System for Videos on Oksusu Application** 2017
Keywords: Deep Learning, Sequence/Word Embedding, Approx. k-NN, Heterogeneous Features
SK Telecom, Seoul, Republic of Korea
2. **A Fast and Cost Efficient Data Compression with Shared Virtual Memory in Heterogeneous System Architecture** 2017
Keywords: OpenCL, GPGPU, SVM, HSA
Undergraduate thesis
3. **Personalized Recommendation for Credit Card Rewards** 2016
Keywords: Coupled Matrix Factorization, Time Series Data
Hyundai Card, Seoul, Republic of Korea
4. **Social Recommender System with Graph and Rating Information** 2016
Keywords: Matrix Factorization, Network Embedding, Social Network
Final project of Probabilistic Graphical Model course

PATENTS

1. U Kang, Junghwan Kim, and Haekyu Park, “Apparatus and Method for Representation Learning in Signed Directed Networks”, Korean Patent 10-2017-0130914, 2017.
2. U Kang, Haekyu Park, Junghwan Kim, and Hyunsik Jeon, “Explainable and Accurate Recommender Method and System using Social Network Information and Rating Information”, Korean Patent 10-2017-0159167, 2017.

AWARDS AND HONORS

- National Scholarship For Science and Engineering** 2015
Merit-based

GRADUATE COURSEWORK

- Computer Vision @ Georgia Institute of Technology Fall 2018
Machine Learning @ Georgia Institute of Technology Fall 2018
Information Visualization @ Georgia Institute of Technology Fall 2018
Probabilistic Graphical Models @ Seoul National University Fall 2016

TECHNICAL SKILLS

Programming Languages

Advanced: Python, R, Java, C, C++
Experienced: Matlab, JavaScript, HTML, Ocaml, Scheme

Machine Learning and Numerical Computing

Advanced: Numpy, SciPy, scikit-learn
Experienced: OpenCV, TensorFlow

Data Visualization

Advanced: Matplotlib

Experienced: D3.js, ggplot

Parallel Computing

Experienced: OpenCL