Haekyu Park

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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)

Work Experience

Graduate Research Assistant — Aug 2018 - Present
Georgia Institute of Technology, Atlanta, GA

Data Science Intern — May 2019 - Aug 2019
NVIDIA, Austin, TX

Undergraduate Research Assistant — June 2016 - Aug 2017
Seoul National University, Seoul, Republic of Korea

Publications

NeuralDivergence: Exploring and Understanding Neural Networks by Comparing Activation Distributions
Haekyu Park, Fred Hohman, Duen Horng Chau
Poster, Pacific Vis, 2019.

SIDE: Representation Learning in Signed Directed Networks
Junghwan Kim, Haekyu Park, Ji-Eun Lee, and U Kang
The Web Conference, 2018.

A Comparative Study of Matrix Factorization and Random Walk with Restart in Recommender Systems
Haekyu Park, Jinhong Jung, and U Kang
IEEE Big Data, 2017.

Projects

Explore the history of space and interplanetary travel through a visualization of space data — 2018
Keywords: Information Visualization, Scrollytelling, d3.js
`https://psy901.github.io/space-mission-project/`

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

A Fast Data Compression with Shared Virtual Memory in Heterogeneous System Architecture — 2017
Keywords: OpenCL, GPGPU, SVM, HSA
Undergraduate thesis

Personalized Recommendation for Credit Card Rewards — 2016
Keywords: Coupled Matrix Factorization, Time Series Data
Hyundai Card, Seoul, Republic of Korea

Grants and Funding

Amazon AWS Research Grant — 2018
Co-PIs: Nilaksh Das, Scott Freitas, Duen Horng Chau
Funded $5,000 in AWS cloud credits

Awards and Honors

National Scholarship For Science and Engineering — 2015
Merit-based

Patents

Apparatus and Method for Representation Learning in Signed Directed Networks
U Kang, Junghwan Kim, and Haekyu Park
Korean Patent 10-2017-0130914, 2017.

Skills

Programming Languages
Python, JavaScript, HTML, R, Matlab, Java, C, C++, Ocaml, Scheme

Machine Learning / Deep Learning / Data Science
TensorFlow, Keras, Numpy, SciPy, scikit-learn, OpenCV, Pandas, NetworkX, cuML, cuGraph, cuDF

Data Visualization
D3.js, HoloViews, Matplotlib, WebGL, ggplot

Parallel Computing
OpenCL

Professional Service

Reviewer
KDD 2019