

# Haekyu Park

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Education	<b>Ph.D., Computer Science</b> Georgia Institute of Technology, Atlanta, GA Advisor: Dr. Polo Chau	Aug 2018 - Present
	<b>B.S., Computer Science and Engineering</b> Seoul National University, Seoul, Republic of Korea Graduated with honors (Cum Laude)	Mar 2012 - Aug 2017
Research Experience	<b>Graduate Research Assistant</b> Georgia Institute of Technology, Atlanta, GA	Aug 2018 - Present
	<b>Data Science Intern</b> NVIDIA, Austin, TX Mentor: Bartley Richardson, Brad Rees, Joe Eaton The work was integrated into NVIDIA tutorial session at KDD 2019.	May 2019 - Aug 2019
	<b>Undergraduate Research Assistant</b> Seoul National University, Seoul, Republic of Korea	June 2016 - Aug 2017
Honors	<b>Amazon AWS Research Grant</b> Co-PIs: Nilaksh Das, Scott Freitas, Duen Horng Chau Funded \$5,000 in AWS cloud credits	2018
	<b>National Scholarship For Science and Engineering</b> Merit-based	2015
Publications	<b>Summit: Scaling Deep Learning Interpretability by Visualizing Activation and Attribution Summarizations</b> Fred Hohman, <u>Haekyu Park</u> , Caleb Robinson, Duen Horng Chau IEEE VIS (VAST), 2019.	
	<b>MLsploit: A Cloud-Based Framework for Adversarial Machine Learning Research</b> Nilaksh Das, Siwei Li, Chanil Jeon, Jinho Jung, Shang-Tse Chen, Carter Yagemann, Evan Downing, <u>Haekyu Park</u> , Evan Yang, Li Chen, Michael Kounavis, Ravi Sahita, David Durham, Scott Buck, Duen Horng Chau, Taesoo Kim, Wenke Lee Workshop Presentation, Black Hat Asia - Arsenal, 2019.	
	<b>NeuralDivergence: Exploring and Understanding Neural Networks by Comparing Activation Distributions</b> <u>Haekyu Park</u> , Fred Hohman, Duen Horng Chau Poster, PacificVis, 2019.	
	<b>SIDE: Representation Learning in Signed Directed Networks</b> Junghwan Kim, <u>Haekyu Park</u> , Ji-Eun Lee, and U Kang The Web Conference, 2018.	
	<b>A Comparative Study of Matrix Factorization and Random Walk with Restart in Recommender Systems</b> <u>Haekyu Park</u> , Jinhong Jung, and U Kang IEEE Big Data, 2017.	

Talks	<b>NeuralDivergence: Exploring and Understanding Neural Networks by Comparing Activation Distributions</b> Apr 2019 PacificVis	
	<b>A Comparative Study of Matrix Factorization and Random Walk with Restart in Recommender Systems</b> 2017 IEEE Big Data	
Teaching	<b>Graduate Teaching Assistant</b> Georgia Institute of Technology, Atlanta, GA Data and Visual Analytics (CSE 6242), Instructor: Polo Chau	
Projects	<p><b>Explore the history of space and interplanetary travel through a visualization of space data</b>            Keywords: Information Visualization, Scrollytelling, d3.js  <a href="https://psy901.github.io/space-mission-project/">https://psy901.github.io/space-mission-project/</a></p> <p><b>Recommender System for Videos on Oksusu Application</b>            Keywords: Deep Learning, Sequence/Word Embedding, Approx. k-NN, Heterogeneous Features            SK Telecom, Seoul, Republic of Korea</p> <p><b>A Fast Data Compression with Shared Virtual Memory in Heterogeneous System Architecture</b>            Keywords: OpenCL, GPGPU, SVM, HSA            Undergraduate thesis</p> <p><b>Personalized Recommendation for Credit Card Rewards</b>            Keywords: Coupled Matrix Factorization, Time Series Data            Hyundai Card, Seoul, Republic of Korea</p>	2018
Skills	<p><b>Programming Languages</b>            Python, JavaScript, HTML, R, Matlab, Java, C, C++, Ocaml, Scheme</p> <p><b>Machine Learning / Deep Learning / Data Science</b>            TensorFlow, Keras, scikit-learn, OpenCV, Numpy, Pandas, SciPy, NetworkX</p> <p><b>GPU-accelerated Data Science</b>            cuGraph, cuDF, cuML, BlazingSQL, OpenCL</p> <p><b>Data Visualization</b>            D3.js, HoloViews, Matplotlib, WebGL, ggplot</p>	2017
Professional Service	<b>Reviewer</b> KDD 2019	2016