

## Kijung Shin

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CONTACT INFORMATION	Dept. of Computer Science, GHC 9005 Carnegie Mellon University 5000 Forbes Avenue Pittsburgh, PA 15213	Homepage: <a href="http://kijungshin.com">http://kijungshin.com</a> Email: <a href="mailto:kijungs@cs.cmu.edu">kijungs@cs.cmu.edu</a>
RESEARCH INTERESTS	Graph Mining, Social Media Analysis, Big Data Analytics Systems, Tensor Analysis	
EDUCATION	<b>Carnegie Mellon University</b> , Pittsburgh, PA PhD in Computer Science Advisor: Prof. Christos Faloutsos	Sep 2015 - Present
	<b>Carnegie Mellon University</b> , Pittsburgh, PA MS in Computer Science	Dec 2017
	<b>Seoul National University</b> , Seoul, Korea BS in Computer Science and Engineering BA in Economics (Double Major) GPA: 4.21/4.30 (Ranked 1st in College of Engineering, Summa Cum Laude)	Aug 2015
WORK EXPERIENCE	<b>LinkedIn Corporation</b> , Sunnyvale, CA Machine Learning and Relevance Engineer Intern Mentors: Dr. Mahdi Shafiei and Dr. Myunghwan Kim Developed a model and a scalable algorithm for progression-stage learning	May 2017 to Aug 2017
	<b>Seoul National University</b> , Seoul, Korea Research Intern (Part Time) Advisor: Prof. Byung-Gon Chun Developed a distributed machine learning library on top of Apache REEF	Jan 2015 to Jun 2015
	<b>KAIST</b> , Daejeon, Korea Research Intern Advisor: Prof. U Kang Developed scalable algorithms for random walk with restart and tensor factorization	Jan 2014 to Aug 2014
	<b>CYRAM</b> , Seoul, Korea Associate Researcher Supervisor: Mr. Ghi-Hoon Ghim Developed a social network analysis software (NetMiner 4), a criminal analysis software (NetExplorer 3), and a Twitter analysis and monitoring service (Sopion.com)	Jan 2011 to Dec 2013
REFERRED JOURNAL PAPERS	J5. <a href="#">Kijung Shin</a> , Bryan Hooi, and Christos Faloutsos, “Fast, Accurate and Flexible Algorithms for Dense Subtensor Mining”, TKDD. (Accepted)	
	J4. <a href="#">Kijung Shin</a> , Tina Eliassi-Rad, and Christos Faloutsos, “Patterns and Anomalies in k-Cores of Real-world Graphs with Applications”, KAIS. (Accepted)	
	J3. Bryan Hooi, <a href="#">Kijung Shin</a> , Hyun Ah Song, Alex Beutel, Neil Shah, and Christos Faloutsos, “Graph-Based Fraud Detection in the Face of Camouflage”, TKDD 2017. ( <i>Special Issue on the Best Papers from KDD 2016</i> )	
	J2. <a href="#">Kijung Shin</a> , Lee Sael, and U Kang, “Fully Scalable Methods for Distributed Tensor Factorization”, TKDE 2017.	
	J1. Jinhong Jung, <a href="#">Kijung Shin</a> , Lee Sael, and U Kang, “Random Walk with Restart on Large Graphs Using Block Elimination”, TODS 2016.	

- REFERRED  
CONFERENCE  
PAPERS
- C13. [Kijung Shin](#), “WRS: Waiting Room Sampling for Accurate Triangle Counting in Real Graph Streams”, ICDM 2017.
  - C12. Hemank Lamba, Bryan Hooi, [Kijung Shin](#), Christos Faloutsos, and Jürgen Pfeffer, “ZooRank: Ranking Suspicious Entities in Time-Evolving Tensors”, ECML/PKDD 2017.
  - C11. [Kijung Shin](#), Bryan Hooi, Jisu Kim, and Christos Faloutsos, “DenseAlert: Incremental Dense-Subtensor Detection in Tensor Streams”, KDD 2017.
  - C10. [Kijung Shin](#), Euiwoong Lee, Dhivya Eswaran, and Ariel D. Procaccia, “Why You Should Charge Your Friends for Borrowing Your Stuff”, IJCAI 2017. (*Featured in New Scientist*)
  - C9. [Kijung Shin](#), Bryan Hooi, Jisu Kim, and Christos Faloutsos, “D-Cube: Dense-Block Detection in Terabyte-Scale Tensors”, WSDM 2017. (*SIGIR Student Travel Grant*)
  - C8. Jinoh Oh, [Kijung Shin](#), Evangelos E. Papalexakis, Christos Faloutsos, and Hwanjo Yu, “S-HOT: Scalable High-Order Tucker Decomposition”, WSDM 2017.
  - C7. [Kijung Shin](#), Tina Eliassi-Rad, and Christos Faloutsos, “CoreScope: Graph Mining Using k-Core Analysis - Patterns, Anomalies and Algorithms”, ICDM 2016.
  - C6. [Kijung Shin](#), Bryan Hooi, and Christos Faloutsos, “M-Zoom: Fast Dense-Block Detection in Tensors with Quality Guarantees”, ECML/PKDD 2016.
  - C5. Bryan Hooi, Hyun Ah Song, Alex Beutel, Neil Shah, [Kijung Shin](#), and Christos Faloutsos, “FRAUDAR: Bounding Graph Fraud in the Face of Camouflage”, KDD 2016. (*SIGKDD Best Research Paper Award*)
  - C4. Hemank Lamba\*, Vaishnavh Nagarajan\*, [Kijung Shin](#)\*, and Naji Shajarisales\*, “Incorporating Side Information in Tensor Completion”, WWW Companion 2016.
  - C3. [Kijung Shin](#), Jinhong Jung, Lee Sael, and U Kang, “BEAR: Block Elimination Approach for Random Walk with Restart on Large Graphs”, SIGMOD 2015. (*Samsung Humantech Paper Award, SIGMOD Student Travel Award*)
  - C2. [Kijung Shin](#) and U Kang, “Distributed Methods for High-dimensional and Large-scale Tensor Factorization”, ICDM 2014. (*ICDM Student Travel Award*)
  - C1. Dongyeop Kang, Woosang Lim, [Kijung Shin](#), Lee Sael, and U Kang, “Data/Feature Distributed Stochastic Coordinate Descent for Logistic Regression”, CIKM 2014.
- OTHER  
PAPERS
- O2. [Kijung Shin](#), Tina Eliassi-Rad, and Christos Faloutsos, “Patterns and Anomalies in k-Cores of Real-world Networks”, NetSci 2017. (Abstract)
  - O1. [Kijung Shin](#), “Scalable Methods for Random Walk with Restart and Tensor Factorization”, Bachelor’s Thesis, Seoul National University, 2015. (*Excellent CSE Thesis Award*)
- RELEASED  
SOFTWARE
- Dolphin** (<https://github.com/cmssnu/dolphin>) Jan 2015 to Jun 2015  
Distributed machine learning library on top of Apache REEF
  - NetMiner** (<http://www.netminer.com>) Jan 2011 to Dec 2013  
Social network analysis software

AWARDS & HONORS	ACM SIGKDD Best Research Paper Award	Aug 2016
	Korea Foundation for Advanced Studies Scholarship	2015 to 2020
	Excellent CSE Thesis Award, Seoul National University	Aug 2015
	Samsung Humantech Paper Award (Gold Prize, 1st in Computer Science)	Feb 2015
	Kwanjeong Educational Foundation Scholarship	2010, 2014, 2015
	Best Term Paper Award, Seoul National University	Feb 2010
	Scholarship for Superior Academic Performance, Seoul National University	2009
	National Science & Technology Scholarship, Korea Scholarship Foundation	2008
TEACHING EXPERIENCE	Teaching Assistant of 10-601 Introduction to Machine Learning (taught by Prof. Tom Mitchell)	Fall 2017
	Teaching Assistant of 15-780 Graduate Artificial Intelligence (taught by Prof. Zico Kolter and Prof. Ariel Procaccia)	Spring 2017
GRADUATE COURSEWORK	15-859N Spectral Graph Theory and the Laplacian Paradigm	Fall 2016
	15-814 Types and Programming Languages	Fall 2016
	15-780 Graduate Artificial Intelligence	Spring 2016
	15-826 Multimedia Databases and Data Mining	Spring 2016
	10-715 Advanced Introduction to Machine Learning	Fall 2015
	15-853 Algorithms in the Real World	Fall 2015
ONLINE COURSEWORK	Machine Learning & Artificial Intelligence	
	• Scalable Machine Learning (edX)	Aug 2015
	• Statistical Learning (Stanford Online)	Apr 2014
	• Artificial Intelligence for Robotics (Udacity)	Apr 2012
	• Introduction to Artificial Intelligence (Udacity)	Dec 2011
	• Machine Learning (Coursera)	Dec 2011
	Data Mining & Social Network Analysis	
	• Introduction to Recommender Systems (Coursera)	Aug 2015
	• Networks, Crowds, and Markets (edX)	May 2014
	• Social Network Analysis (Coursera)	Nov 2012
• Networked Life (Coursera)	Oct 2012	
PROFESSIONAL SERVICES	Journal Reviews	
	• IEEE Signal Processing Letters (SPL)	2017
	• IEEE/ACM Transactions on Networking (ToN)	2017
TECHNICAL SKILLS	Programming Languages	
	• Java (Advanced) / Python, C (Experienced) / C++, MATLAB (Intermediate)	
	Big Data Platforms and Databases	
	• Hadoop, REEF, MySQL (Experienced) / Oracle database (Intermediate)	
REFERENCES	Available on request	