JAY YOON LEE

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EDUCATION

CARNEGIE MELLON UNIVERSITY, (CSD) Ph.D. in Computer Science (GPA: 3.95 /4.3)

May.2013 – Present Advisor: Jaime Carbonell

CARNEGIE MELLON UNIVERSITY, (LTI & LCCB)

Sep.2011 – May.2013

M.S. in Computer Science (GPA: 3.95 /4.3)

KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (KAIST) Mar. 2003 – 2008 B.S. in Electrical Engineering, summa cum laude, 2008 (GPA: 3.94/4.3)

SCHOLARSHIPS & AWARDS **PUBLICATIONS**

- Scholarship in Science & Technology, Korea Student Foundation Mar.2003 - Feb.2008
- Scholarship in Mathematics, Korea Foundation of Advanced Studies Mar. 2005 Feb. 2008
- 1. Jay-Yoon Lee*, Kyung Tae Lim*, Jaime Carbonell, Thierry Poibeau, Semi-Supervised Learning on Meta Structure: Multi-Task Tagging and Parsing in Low-Resource Scenario, AAAI 2020, Feb 2020
- 2. Jay-Yoon Lee, Sanket Mehta, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell, Gradient-based Inference for Networks with Output Constraints, AAAI 2019, Jan 2019
- Jay-Yoon Lee*, Sanket Mehta*, Jaime Carbonell, Towards Semi-Supervised Learning for Deep Semantic Role Labeling, EMNLP 2018, Oct 2018 (*: equal contribution)
- Jay-Yoon Lee, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell, Enforcing constraints on outputs with unconstrained inference, NIPS workshop AKBC, Dec 2017
- Jay-Yoon Lee*, Manzil Zaheer*, Stephan Günnemann, Alex Smola, Preferential Attachment in Graphs with Affinities, AISTATS 2015, May 2015 (*: equal contribution)
- U Kang, Jay-Yoon Lee, Danai Koutra and Christos Faloutsos, Net-Ray: Visualizing and Mining Billion-Scale Graphs, PAKDD 2014, May 2014
- 7. Yibin Lin, Agha Ali Raza, Jay-Yoon Lee, Danai Koutra, Roni Rosenfeld, Christos Faloutsos, Influence Propagation: Patterns, Model and Case Study, PAKDD 2014, May 2014
- Ted E. Senator, Jay-Yoon Lee et al., Detecting insider threats in a real corporate database of computer usage activity, KDD 2013, August 2013
- Jay-Yoon Lee, U Kang, Danai Koutra and Christos Faloutsos, Fast Anomaly Detection despite the Duplicates, poster paper on WWW 2013, May 2013

RESEARCH **EXPERIENCE**

Research Assistant under Professor Jaime Carbonell Multi-task, Transfer learning using constraint injection. Oct.2015 – Present

Research Assistant under Professor Christos Faloutsos June.2012 -Oct.2015

Anomaly detection algorithm on large graphs

TEACHING

Teaching Assistant for Multimedia Databases and Data Mining Fall 2014 **Teaching Assistant** for Machine Learning (Ph.D. course) Spring 2015

GRADUATE COURSEWORK Probabilistic graphical models, Deep Learning, Deep RL 2015+ Statistical Machine Learning, Graduate Algorithm, Advanced and Distributed OS 2014 Spectral Graph Theory, Convex Optimization Fall 2013 Intermediate Statistics, Multimedia Databases and Data Mining Fall 2012

WORK **EXPERIENCE**

Google AI, New York, Tag-constrained Transformer for text normalization. Research Internship with Hao Zhang, Language and Speech, Oct.2019 - Jan.2020 Microsoft Research, Redmond, Combinatorial action RL for task-oriented dialogue.

Summer Internship with Sungjin Lee, Jianfeng Gao, **Deep Learning group** May. 2019 – Aug. 2019

Microsoft Research, Redmond, Improving conversation using multiple metrics.

Summer Internship with Paul Bennett, Information and Data Sciences, June. 2017 - Aug. 2017 Oracle Labs, Boston, MA Syntactic parsing with output constraint on seq2seq.

Summer Internship, with Michael Wick, IRML group, June.2016 - Aug.2016

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Winner, NeuroHackathon (Brain), Carnegie Mellon University, June 2016, \$5,000 team prize. Best Presenter, Global Top Talent, Hyundai Corporation, August 2016, \$3,000 prize.

Topic: Predicting part failures through Hierarchical LSTM.