

JAY YOON LEE

Postdoctoral Research Associate,
Information Extraction and Synthesis Laboratory,
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EDUCATION

CARNEGIE MELLON UNIVERSITY, (CSD) May.2013 – July.2020
Ph.D. in Computer Science (GPA: 3.95 / 4.3) 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**

1. Scholarship in Science & Technology, Korea Student Foundation Mar.2003 – Feb.2008
2. Scholarship in Mathematics, Korea Foundation of Advanced Studies Mar.2005 – Feb.2008

**SELECTED
PUBLICATIONS**

1. **Jay-Yoon Lee***, KyungTae Lim*, Jaime Carbonell, Thierry Poibeau, *Semi-Supervised Learning on Meta Structure: Multi-Task Tagging and Parsing in Low-Resource Scenario*, **AAAI 2020** (*: equal contribution)
2. **Jay-Yoon Lee**, Sanket Mehta, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell, *Gradient-based Inference for Networks with Output Constraints*, **AAAI 2019**
3. **Jay-Yoon Lee***, Sanket Mehta*, Jaime Carbonell, *Towards Semi-Supervised Learning for Deep Semantic Role Labeling*, **EMNLP 2018**, Oct 2018 (*: equal contribution)
4. **Jay-Yoon Lee**, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell, *Enforcing constraints on outputs with unconstrained inference*, **NIPS workshop AKBC**, Dec 2017
5. **Jay-Yoon Lee***, Manzil Zaheer*, Stephan Günnemann, Alex Smola, *Preferential Attachment in Graphs with Affinities*, **AISTATS 2015**, May 2015 (*: equal contribution)
6. Vidhisha Balachandran, Artidoro Pagnoni, **Jay-Yoon Lee**, Dheeraj Rajagopal, Jaime G Carbonell, Yulia Tsvetkov, *StructSum: Summarization via Structured Representations*, **EACL 2021**
7. Zhiyang Xu, Andrew Drozdov, **Jay-Yoon Lee**, Tim O'Gorman, Subendhu Rongali, Dylan Finkbeiner, Shilpa Suresh, Mohit Iyyer, Andrew McCallum, *Improved Latent Tree Induction with Distant Supervision via Span Constraints*, **EMNLP2021**
8. Rajarshi Das, Manzil Zaheer, Dung Thai, Ameya Godbole, Ethan Perez, **Jay-Yoon Lee**, Lizhen Tan, Lazaros Polymenakos, Andrew McCallum, *Case-based Reasoning for Natural Language Queries over Knowledge Bases*, **EMNLP2021**

**RESEARCH
EXPERIENCE**

Postdoctoral Research Associate under Professor Andrew McCallum. July.2020- Present
Constraint injection, Energy-based models and Box representation
Research Assistant under Professor Jaime Carbonell Oct.2015 – July.2020
Semi-supervised & Transfer learning using constraint injection.
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
COURSE**

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

Miscellaneous

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