

**JAY YOON LEE**

Postdoctoral Research Associate,  
Information Extraction and Synthesis Laboratory,  
College of Information & Computer Sciences, UMass Amherst  
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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)** Sept.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**

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

**SELECTED  
PUBLICATIONS**

- 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)
- Jay-Yoon Lee**, Sanket Mehta, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell, *Gradient-based Inference for Networks with Output Constraints*, **AAAI 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 2017**
- Jay-Yoon Lee\***, Manzil Zaheer\*, Stephan Günnemann, Alex Smola, *Preferential Attachment in Graphs with Affinities*, **AISTATS 2015** (\*: equal contribution)
- Vidhisha Balachandran, Artidoro Pagnoni, **Jay-Yoon Lee**, Dheeraj Rajagopal, Jaime G Carbonell, Yulia Tsvetkov, *StructSum: Summarization via Structured Representations*, **EACL 2021**
- 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**
- 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
- Probabilistic graphical models, Deep Learning, Deep RL 2015 onward
- Statistical Machine Learning, Graduate Algorithm, Advanced and Distributed OS 2014
- Spectral Graph Theory, Convex Optimization 2013
- Intermediate Statistics, Multimedia Databases and Data Mining 2012

**GRADUATE  
COURSE****WORK  
EXPERIENCE**

- Google AI, New York, NY**, Tag-constrained Transformer for text normalization.  
*Research Internship* with Hao Zhang, *Language and Speech*, Oct.2019 – Jan.2020
- Microsoft Research, Redmond, WA**, Combinatorial action RL for task-oriented dialogue.  
*Summer Internship* with Sungjin Lee, Jianfeng Gao, *Deep Learning group* May.2019 – Aug.2019
- Microsoft Research, Redmond, WA**, Improving conversation using multiple metrics.  
*Summer Internship* with Paul Bennett, *Information and Data Sciences*, June.2017 – Aug.2017
- Oracle Labs, Burlington, 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.