**Curriculum Vitae**

**JAY YOON LEE**

Postdoctoral Research Associate,

[Information Extraction and Synthesis Laboratory](http://www.iesl.cs.umass.edu/people),

[College of Information & Computer Sciences](https://www.cics.umass.edu/), 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)** Sep.2011 – May.2013

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

**SCHOLARSHIPS & AWARDS**

**SELECTED**

**PUBLICATIONS**

**RESEARCH EXPERIENCE**

**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)**

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
3. **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)
4. **Jay-Yoon Lee**, Sanket Mehta, Michael Wick, Jean-Baptiste Tristan, Jaime Carbonell*, Gradient-based Inference for Networks with Output Constraints,* **AAAI 2019**
5. **Jay-Yoon Lee\***, Sanket Mehta\*, Jaime Carbonell*, Towards Semi-Supervised Learning for Deep Semantic Role Labeling,* **EMNLP 2018**, Oct 2018 (\*: equal contribution)
6. **Jay-Yoon Lee**, Michael Wick, Jean-Baptiste Tristan*,* Jaime Carbonell, *Enforcing constraints on outputs with unconstrained inference,* **NIPS workshop AKBC**, Dec 2017
7. **Jay-Yoon Lee\*,** Manzil Zaheer\*, Stephan Günnemann, Alex Smola, *Preferential Attachment in Graphs with Affinities,* **AISTATS 2015,** May 2015 (\*: equal contribution)
8. Vidhisha Balachandran, Artidoro Pagnoni, **Jay-Yoon Lee**, Dheeraj Rajagopal, Jaime G Carbonell, Yulia Tsvetkov,  [*StructSum: Summarization via Structured Representations*](https://arxiv.org/abs/2003.00576)*,* **EACL 2021**
9. 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*](https://arxiv.org/abs/2109.05112), **EMNLP2021**
10. 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*](https://arxiv.org/abs/2104.08762)*,* **EMNLP2021**

**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**

**WORK EXPERIENCE**

**Miscellaneous**

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

**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

*Winner***, NeuroHackathon (Brain)**, Carnegie Mellon University, June 2016, $5,000 team prize.

*Best Presenter***, Global Top Talent**, Hyundai Corporation, August 2016, $3,000 prize.