**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)** Sept.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 2017**
7. **Jay-Yoon Lee\*,** Manzil Zaheer\*, Stephan Günnemann, Alex Smola, *Preferential Attachment in Graphs with Affinities,* **AISTATS 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), **EMNLP 2021**
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)*,* **EMNLP 2021**

**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 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

**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

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

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