

Yoon Kim

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Employment

Jul 2021 – Assistant Professor
Massachusetts Institute of Technology

Education

2020 Ph.D., Computer Science
Harvard University
Advisor: Alexander Rush
Thesis: “Deep Latent Variable Models of Natural Language”

2015 M.S., Data Science
New York University
Advisor: David Sontag

2012 M.A., Statistics
Columbia University

2009 B.A., Mathematics
B.A., Economics
Cornell University

Honors

2020 Harvard University, Award for outstanding doctoral dissertation in CS

2018 Google, Ph.D. Fellowship

2017 ACL, Best Demo Paper Award Runner-Up

2014 KDD Cup, 1st place

2013 NYU, Full merit scholarship for M.S. degree

2009 Cornell University, Phi Beta Kappa

Past Employment

Jun 2019 – Jul 2021 Research Scientist
MIT-IBM Watson AI Lab

May 2019 – Aug 2019 Research Intern
Google

May 2018 – Aug 2018 Research Intern
DeepMind

May 2017 – Aug 2017 Research Intern
Facebook

Jul 2012 – Aug 2016 Data Scientist
American International Group

Oct 2011 – Jul 2012 Analyst
Barclays Capital

Jul 2009 – Oct 2011 Analyst
Morgan Stanley

May 2008 – Aug 2008 Analyst Intern
Merill Lynch

Conference Publications

- EMNLP '20 Demi Guo, Yoon Kim, Alexander M. Rush. "Sequence-Level Mixed Sample Data Augmentation." In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing*.
- ICML '20 Rares-Darius Buhai, Yoni Halpern, Yoon Kim, Andrej Risteski, David Sontag. "Empirical Study of the Benefits of Overparameterization in Learning Latent Variable Models." In *Proceedings of the 37th International Conference on Machine Learning*.
- ICML '20 Jonathan Mamou, Hang Le, Miguel Del Rio, Cory Stephenson, Hanlin Tang, Yoon Kim, SueYeon Chung. "Emergence of Separable Manifolds in Deep Language Representations." In *Proceedings of the 37th International Conference on Machine Learning*.
- NeurIPS '19 Sam Wiseman, Yoon Kim. "Amortized Bethe Free Energy Minimization for Learning MRFs." In *Proceedings of the 33rd Conference on Neural Information Processing Systems*.
- ACL '19 Yoon Kim, Chris Dyer, Alexander M. Rush. "Compound Probabilistic Context-Free Grammars for Grammar Induction." In *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics*.
- NAACL '19 Yoon Kim, Alexander M. Rush, Lei Yu, Adhiguna Kuncoro, Chris Dyer, Gábor Melis. "Unsupervised Recurrent Neural Network Grammars." In *Proceedings of the 17th Annual Conference of the North American Chapter of the Association for Computational Linguistics*.
- AISTATS '19 Adji B. Dieng, Yoon Kim, Alexander M. Rush, David M. Blei. "Avoiding Latent Variable Collapse with Generative Skip Models." In *Proceedings of the 22nd International Conference on Artificial Intelligence and Statistics*.
- NeurIPS '18 Yuntian Deng, Yoon Kim, Justin Chiu, Demi Guo, Alexander M. Rush. "Latent Alignment and Variational Attention." In *Proceedings of the 32nd Conference on Neural Information Processing Systems*.
- ICML '18 Yoon Kim, Sam Wiseman, Andrew C. Miller, David Sontag, Alexander M. Rush. "Semi-Amortized Variational Autoencoders." In *Proceedings of the 35th International Conference on Machine Learning*.
- ICML '18 Jake Zhao, Yoon Kim, Kelly Zhang, Alexander M. Rush, Yann LeCun. "Adversarially Regularized Autoencoders." In *Proceedings of the 35th International Conference on Machine Learning*.
- EMNLP '17 Allen Schmaltz, Yoon Kim, Alexander M. Rush, Stuart M. Shieber. "Adapting Sequence Models for Sentence Correction." In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*.
- ACL '17 Guillaume Klein, Yoon Kim, Yuntian Deng, Jean Senellart, Alexander M. Rush. "OpenNMT: Open-Source Toolkit for Neural Machine Translation." In *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (System Demonstrations)*.
- ICLR '17 Yoon Kim, Carl Denton, Luong Hoang, Alexander M. Rush. "Structured Attention Networks." In *Proceedings of the 5th International Conference on Learning Representations*.
- EMNLP '16 Yoon Kim, Alexander M. Rush. "Sequence-Level Knowledge Distillation." In *Proceedings of the 2016 Conference on Empirical Methods in Natural Language Processing*.
- AAAI '16 Yoon Kim, Yacine Jernite, David Sontag, Alexander M. Rush. "Character-Aware Neural Language Models." In *Proceedings of the Thirtieth AAAI Conference on Artificial Intelligence*.
- EMNLP '14 Yoon Kim. "Convolutional Neural Networks for Sentence Classification." In *Proceedings of the 2014 Conference on Empirical Methods in Natural Language Processing*.

Workshop & Other Publications

- 2018 Yoon Kim, Sam Wiseman, Alexander M. Rush. “A Tutorial on Deep Latent Variable Models of Natural Language.” Tutorial at EMNLP.
- 2018 Gabriel Grand, Aron Szanto, Yoon Kim, Alexander M. Rush. “On the Flip Side: Identifying Counterexamples in Visual Question Answering.” In *Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining* (Deep Learning Day).
- 2016 Allen Schmaltz, Yoon Kim, Alexander M. Rush, and Stuart M. Shieber. “Sentence-Level Grammatical Error Identification as Sequence-to-Sequence Correction.” In *Proceedings of the 11th Workshop on Innovative Use of NLP for Building Educational Applications*.
- 2014 Yoon Kim, Yi-I Chiu, Kentaro Hanaki, Darshan Hegde, Slav Petrov. “Temporal Analysis of Language through Neural Language Models.” In *Proceedings of the ACL 2014 Workshop on Language Technologies and Computational Social Science*.
- 2014 Yoon Kim, Owen Zhang. “Credibility Adjusted Term Frequency: A Supervised Term Weighting Scheme for Sentiment Analysis and Text Classification.” In *Proceedings of the 5th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media*.

Professional Activities

- 2019 ICLR Workshop Co-organizer: “Deep Generative Models for Highly Structured Data.”
- 2018 EMNLP Tutorial: “Deep Latent Variable Models of Natural Language.”
- Reviewing: AAAI (2020), ACL (2017, 2018, 2019, 2020), CoNLL (2018, 2019), EMNLP (2018, 2019, 2020), ICLR (2019, 2020, 2021), ICML (2019), NAACL (2019), NeurIPS (2018, 2019, 2020), UAI (2018, 2019)

Teaching

- Spring 2018 Co-Instructor and Teaching Fellow
CS 287: Machine Learning for Natural Language
- Fall 2016 Teaching Fellow
CS 109: Data Science

Talks

- Oct 2020 Stanford, NLP Seminar
- Oct 2020 Seoul National University, Data Science Seminar
- Sep 2020 SK Telecom, AI Conference
- Sep 2020 KAIST, CS Colloquium
- Aug 2020 Seoul National University, AI Summer School
- Apr 2020 University of Toronto, CS Colloquium
- Apr 2020 University of Chicago, CS Colloquium
- Mar 2020 MIT, EECS Colloquium
- Feb 2020 Carnegie Mellon University, CS Colloquium
- Feb 2020 Harvard University, CS Colloquium
- Feb 2020 New York University, CS Colloquium
- Feb 2020 Columbia University, CS Colloquium
- Jan 2020 Toyota Technological Institute at Chicago, Colloquium
- Sep 2019 MIT, Computational Psycholinguistics Lab
- Sep 2019 UMass Amherst, Machine Learning and Friends Lunch
- Jan 2018 KAIST, Computational NeuroSystems Lab
- Jan 2018 Seoul National University, Vision and Learning Lab
- Jan 2018 Samsung Electronics

Jan 2018	SK Telecom
Jan 2018	Kakao Brain
Dec 2017	Naver
May 2017	OpenAI
Apr 2017	Boston Machine Learning Meetup
Apr 2016	MIT, Spoken Language Systems Group
Dec 2015	MIT, NLP Group
Oct 2014	City University of New York, NLP Seminar