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## ALEXANDER M. RUSH

- Appointment** *Harvard University School of Engineering and Applied Sciences*  
2015-. Assistant Professor of Computer Science
- Facebook Artificial Intelligence Research Lab*  
2015. Post-Doctoral Fellowship  
Advisor: Yann LeCunn
- Education** *Massachusetts Institute of Technology*  
2009-2014. Ph.D, Computer Science.  
Advisor: Michael Collins  
Dissertation: *Relaxation Methods for Natural Language Decoding.*
- Columbia University*  
2011-2014. Visiting Scholar, Department of Computer Science.
- Harvard University*  
2007. B.A., Computer Science. (Magna Cum Laude With Highest Honors.)
- Grants and Awards**
- 2012 Best Paper Award, North American Association of Computational Linguistics.
  - 2010 Best Paper Award, Empirical Methods in Natural Language Processing.
  - 2009 Graduate Research Fellow, National Science Foundation.
  - 2006 Outstanding Undergraduate Award Finalist, Computing Research Association.
- Recent Publications**
- Junbo Zhao, Yoon Kim, Kelly Zhang, Alexander M. Rush, Yann LeCun. *Adversarially Regularized Autoencoders.* *In submission*
  - Sam Wiseman, Stuart M Shieber Alexander M. Rush. *Challenges in Data-to-Document Generation.* *EMNLP 2017*
  - Allen Schmaltz, Yoon Kim, Alexander M. Rush, Stuart M. Shieber. *Adapting Sequence Models for Sentence Correction.* *EMNLP 2017*

Guillaume Klein, Yoon Kim, Yuntian Deng, Jean Senellart, Alexander M. Rush. *OpenNMT: Open-Source Toolkit for Neural Machine Translation*. *ACL Demo 2017 (Best Demo Runner-up)*

Ankit Gupta, Alexander M. Rush. *Dilated Convolutions for Modeling Long-Distance Genomic Dependencies*. *ICML CompBio 2017 (Best Poster)*

Yuntian Deng, Anssi Kanervisto, Jeffrey Ling, and Alexander M. Rush. *Image-to-Markup Generation with Coarse-to-Fine Attention*. *ICML 2017*

Hendrik Strobelt, Sebastian Gehrmann, Hanspeter Pfister, and Alexander M. Rush. *LSTMVis: A Tool for Visual Analysis of Hidden State Dynamics in Recurrent Neural Networks*. *InfoVis 2017*

Yoon Kim, Carl Denton, Luong Hoang, and Alexander M. Rush. *Structured Attention Networks*. *ICLR 2017*

Greg Yang and Alexander M. Rush. *Lie-Access Neural Turing Machines*. *ICLR 2017*

Yoon Kim and Alexander M. Rush. *Sequence-Level Knowledge Distillation*. *EMNLP 2016*

Alexander M. Rush and Slav Petrov, *Vine Pruning for Efficient Multi-Pass Dependency Parsing*. Proceedings of NAACL 2012. [Best Paper Award]

Terry Koo, Alexander M. Rush, Michael Collins, Tommi Jaakkola, and David Sontag. *Dual Decomposition for Parsing with Non-Projective Head Automata*. Proceedings of EMNLP 2010. [Best Paper Award]

#### *Patents*

Techniques for discriminative dependency parsing (Google). Slav Petrov, Alexander M. Rush, 2015.

Efficient parsing with structured prediction cascades (Google). Slav Petrov, Alexander M. Rush, 2013

Determining user affinity towards applications on a social networking website (Facebook., Thomas S. Whitnah, Alexander M. Rush, Ding Zhou, Ruchi Sangvhi, 2010.

#### Industry

Lead Engineer (Platform Team), *Facebook*, June 2007 – August 2009, Palo Alto, CA.

## Open-Source

[OpenNMT](#) - Open-source neural machine translation system.

[LSTMVis](#) - Visual analysis of recurrent neural network dynamics.

[Sequence-to-Sequence with Attention](#) - General-purpose sequence-to-sequence model .

[CNN for Text Clasification](#) - Convolutional sentence classification.