Samuel J. Wiseman

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Education

Harvard University, Ph.D., Computer Science — Sept. 2012 – May 2018 (Expected)
Cumulative GPA: 3.88/4.0
Research Interests: Natural Language Processing, Machine Learning
Advisors: Prof. Stuart M. Shieber, Prof. Alexander M. Rush

Princeton University, A.B., Philosophy, Magna Cum Laude — June 2010
Certificate Program/Minor: Computer Science
Cumulative GPA: 3.77/4.0

Honors and Awards

Phi Beta Kappa, Princeton University — June 2010
Harvard Bok Center Certificate of Distinction in Teaching — Spring 2014, Spring 2016
Honorable Mention for Best Paper, EMNLP — 2016
Siebel Scholar — 2018
Outstanding Reviewer, NAACL — 2018

Conference Publications

Challenges in Data-to-Document Generation. Sam Wiseman, Alexander M. Rush, and Stuart M. Shieber. In *EMNLP*, 2017. Poster Presentation.

Sequence-to-Sequence Learning as Beam Search Optimization. Sam Wiseman and Alexander M. Rush. In *EMNLP*, 2016. Oral Presentation. Honorable Mention for Best Paper.

- Invited for oral presentation at NIPS 2016 Deep Learning Symposium

Learning Global Features for Coreference Resolution. Sam Wiseman, Alexander M. Rush, and Stuart M. Shieber. In *NAACL*, 2016. Oral Presentation.

Learning Anaphoricity and Antecedent Ranking Features for Coreference Resolution. Sam Wiseman, Alexander M. Rush, Stuart M. Shieber, and Jason Weston. In *ACL*, 2015. Oral Presentation.

Discriminatively Reranking Abductive Proofs for Plan Recognition. Sam Wiseman and Stuart Shieber. In *ICAPS*, 2014. Oral Presentation.

Submitted, Workshop, and Preprint Papers

Semi-Amortized Variational Autoencoders. Yoon Kim, Sam Wiseman, Andrew C. Miller, David Sontag, Alexander M. Rush. arXiv:1802.02550, February 2018.

Improved Entity Tracking for Cloze-style Reading Comprehension. Luong Hoang, Sam Wiseman, Alexander M. Rush. January 2018.

Training Language Models Using Target-Propagation. Sam Wiseman, Sumit Chopra, Marc'Aurelio Ranzato, Arthur Szlam, Ruoyu Sun, Soumith Chintala, Nicolas Vasilache. arXiv:1702.04770, February 2017.

Antecedent Prediction without a Pipeline. Sam Wiseman, Alexander M. Rush, and Stuart M. Shieber. CORBON Workshop, June 2016. Poster Presentation.

Extracting Multi-word, Entity-specific Topics and their Interrelations from Online Medical Forums. Sam Wiseman, Andrew Miller, Finale Doshi-Velez, and Stuart M. Shieber. MUCMD Workshop, August 2015. Oral Presentation.

Academic Internships

Facebook AI Research, New York, NY
Research Intern — Summer 2016, Summer 2017

- Research on retrieval-based text generation, with Marc'Aurelio Ranzato, Arthur Szlam, and Mike Lewis (Summer 2017)
- Research on training RNNs with target-propagation, with Sumit Chopra, Marc'Aurelio Ranzato, and Arthur Szlam (Summer 2016)

Work Experience

Wireless Generation, Brooklyn, NY
Software Developer, Reporting and Analytics Team — Feb. 2012 – July 2012

Columbia University, New York, NY
Research Programmer, Spoken Language Processing Group — Sept. 2011 – Jan. 2012

Morgan Stanley, New York, NY
Software Developer, Prime Brokerage Margin Calculation Team — July 2010 – June 2011

Teaching Experience

Teaching Fellow

- Harvard CS 287: Statistical Natural Language Processing — Spring 2016
- Harvard CS 187: Computational Linguistics — Fall 2014
- Harvard CS 181: Machine Learning — Spring 2014

Service

- Reviewer for: ACL, NAACL, EMNLP, ICML, ICLR, COLING, Computational Linguistics
- Member of Program Committee for:
  - Coreference Beyond Ontonotes (CORBON), 2017
  - Computational Models of Reference, Anaphora, and Coreference (CRAC), 2018
- Chair of Discourse Poster Session, EMNLP 2017

Invited Talks

Invited Talk, Boston University	February 2018
Invited Talk, Wesleyan University	February 2018
Invited Talk, TTIC	January 2018
NIPS Deep Learning Symposium	December 2016
Kensho (company) Research Meeting	February 2016
Boston Children's Hospital NLP Lab Reading Group	September 2015
Meaningful Use of Complex Medical Data (MUCMD) Conference	August 2015
Harvard AI Research Group Meeting	December 2013

Open Source Projects

nn_coref (https://github.com/swiseman/nn_coref)
- A neural coreference system.

BSO (https://github.com/harvardnlp/BSO)
- Beam Search Optimization with seq2seq models.

TPRNN (https://github.com/facebookresearch/TPRNN)
- Training language models with target propagation

data2text (https://github.com/harvardnlp/data2text)
- A system for generating and evaluating summaries of structured data.