Seo, Minjoon

Ph.D. Candidate @ UW & Software Engineer @ NAVER

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Education

University of Washington   Sep 2013 – present
Ph.D. in Computer Science
Area: Natural Language Processing, Question Answering
Advisers: Hannaneh Hajishirzi, Ali Farhadi
Committee: Oren Etzioni, Gina Levow

University of Washington   Sep 2013 – Dec 2015
M.S. in Computer Science

University of California, Berkeley   Aug 2008 – May 2012
B.S. in Electrical Engineering & Computer Science
Cumulative GPA: 3.94/4.0

Publications

[12] Minjoon Seo, Tom Kwiatkowski, Ankur P Parikh, Ali Farhadi, and Hannaneh Hajishirzi. "Phrase-Indexed Question Answering: A New Challenge for Scalable Document Comprehension". In: *EMNLP*. 2018.

[11] Minjoon Seo, Sewon Min, Ali Farhadi, and Hannaneh Hajishirzi. "Neural speed reading via Skim-RNN". In: *ICLR*. 2018.

[10] Aniruddha Kembhavi, Minjoon Seo, Dustin Schwenk, Jonghyun Choi, Hannaneh Hajishirzi, and Ali Farhadi. "Are you smarter than a sixth grader? Textbook question answering for multimodal machine comprehension". In: *CVPR*. 2017.

[9] Omer Levy, Minjoon Seo, Eunsol Choi, and Luke Zettlemoyer. "Zero-shot relation extraction via reading comprehension". In: *CoNLL*. 2017.

[8] Sewon Min, Minjoon Seo, and Hannaneh Hajishirzi. "Question answering through transfer learning from fine-grained supervision data". In: *ACL*. 2017.

[7] Minjoon Seo, Aniruddha Kembhavi, Ali Farhadi, and Hannaneh Hajishirzi. "Bidirectional attention flow for machine comprehension". In: *ICLR*. 2017.

[6] Minjoon Seo, Sewon Min, Ali Farhadi, and Hannaneh Hajishirzi. "Query-reduction networks for question answering". In: *ICLR*. 2017.

[5] Aniruddha Kembhavi, Mike Salvato, Eric Kolve, Minjoon Seo, Hannaneh Hajishirzi, and Ali Farhadi. "A diagram is worth a dozen images". In: *ECCV*. 2016.

[4] Minjoon Seo, Hannaneh Hajishirzi, Ali Farhadi, Oren Etzioni, and Clint Malcolm. "Solving geometry problems: combining text and diagram interpretation". In: *EMNLP*. 2015.

[3] Lilian de Greef, Mayank Goel, Minjoon Seo, Eric C Larson, James W Stout, James A Taylor, and Shwetak N Patel. "Bilicam: using mobile phones to monitor newborn jaundice". In: *UbiComp*. 2014.

[2] Minjoon Seo, Hannaneh Hajishirzi, Ali Farhadi, and Oren Etzioni. "Diagram understanding in geometry questions". In: *AAAI*. 2014.

[1] David Moore, Kevin Mayeda, Steve Myers, Minjoon Seo, and Stuart Russell. "Progress in signal-based bayesian monitoring". In: *The 2012 monitoring research review: ground-based nuclear explosion monitoring technologies*. 2012.

Employment

NAVER @ Korea   Jan 2018 – present
Software Engineer
Initiated and leading Clova Semantic Parsing Team, advancing core technologies for understanding highly complex natural language queries and extracting structured information from documents.

Google @ New York City   Jun – Sep 2017
Research Intern (mentors: Tom Kwiatkowski, Ankur Parikh)
Worked on Phrase-Indexed Question Answering (PIQA) [12], a homogeneous & end-to-end open-domain question answering paradigm, in Google AI Language Team.

Allen Institute for Artificial Intelligence   Jun – Sep 2016, Mar – Jun 2015, Jun – Sep 2014
Research Intern (mentors: Ali Farhadi, Ani Kembhavi, Oren Etzioni)
Worked on a neural question answering model, BiDAF, one of early state-of-the-art systems on SQuAD [7]. Also worked on an automated solver for geometry problems of the US college entrance exam (SAT) [2, 4].

Seoul National University @ Seoul, Korea   Aug – Sep 2013
Research Intern (adviser: Young-gil Shin)
Devised a Markov-chain-based algorithm for slice-matching the medical images of patient torsos, achieving 95% accuracy.

Oracle @ Santa Clara   Aug 2012 – May 2013
Software Engineer
Developed tools for verifying the operating system of Oracle's enterprise switches.

Symantec @ Mountain View   May – Aug 2011
Software Engineering Intern
Developed tools for debugging Symantec Enterprise Protection.

Honors and Awards

- AI2 Key Scientific Challenges Award, 2018
- Travel Award: ICLR 2018, ICLR 2017
- Best Paper Nomination: UbiComp 2014 [3]
- Graduated with Highest Honors (Summa cum Laude), UC Berkeley, 2012

Services

- Organizing Committee: Workshop on Machine Reading for Question Answering (ACL 2018)
- Organizing Committee: Tutorial on Standardized Tests as Benchmark for AI (EMNLP 2018)
- Reviewer: ACL, EMNLP, NAACL, ICLR, NIPS, TKDE, COLING, CoNLL, AAAI
- Teaching Assistant: Graduate Natural Language Processing (Wi 2017)
- Admission Committee: UW CSE Ph.D. Program (2018, 2017)
- Organizing Committee: UW NLP Retreat (2017)

Invited Talks

- DEVIEW 2018 @ Korea (12 Oct 2018)
- GIST @ Korea (5 Oct 2018)
- Microsoft Research (4 May 2018)
- SK Telecom Tech. Open Connect @ Korea (15 Mar 2018)

- IBM Research (15 Feb 2018)
- KAIST (1 Feb 2018)
- PyTorch Korea (21 Jan 2018)
- University of Southern California (10 Oct 2017)
- NAVER @ Korea (02 June 2017)
- Samsung Advanced Institute of Technology (31 May 2017)
- Qualcomm Korea (30 May 2017)
- Seoul National University (30 May 2017)
- Kakao Brain @ Korea (26 May 2017)
- Rework Machine Intelligence Summit @ San Francisco (23 Mar 2017)
- University of Washington & Microsoft Research NLP Symposium (2 Dec 2016)
- Samsung Software Center (26 Sep 2016)
- SK T-Brain @ Korea (21 Sep 2016)