# Seo, Minjoon

Ph.D. Student, UW CSE

Department of Computer Science & Engineering

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## Education

University of Washington

Ph.D. in Computer Science Advisers: Hannaneh Hajishirzi, Ali Farhadi, Oren Etzioni

Sep 2013 –

University of Washington

M.S. in Computer Science

University of California, Berkeley

B.S. in Electrical Engineering & Computer Science

Cumulative GPA: 3.94/4.0

Sep 2013 – Dec 2015

Aug 2008 - May 2012

## **Publications**

- [7] Aniruddha Kembhavi, Mike Salvato, Eric Kolve, Minjoon Seo, Hannaneh Hajishirzi, and Ali Farhadi. "A diagram is worth a dozen images". In: *Proceedings of ECCV*. 2016.
- [6] Minjoon Seo, Aniruddha Kembhavi, Ali Farhadi, and Hannaneh Hajishirzi. "Bidirectional attention flow for machine comprehension". In: arXiv preprint arXiv:1611.01603 (Nov. 2016).
- [5] Minjoon Seo, Ali Farhadi, and Hannaneh Hajishirzi. "Query-regression networks for question answering". In: arXiv preprint arXiv:1606.04582 (June 2016).
- [4] Minjoon Seo, Hannaneh Hajishirzi, Ali Farhadi, Oren Etzioni, and Clint Malcolm. "Solving geometry problems: combining text and diagram interpretation". In: *Proceedings of 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: *Proceedings of UbiComp.* 2014.
- [2] Minjoon Seo, Hannaneh Hajishirzi, Ali Farhadi, and Oren Etzioni. "Diagram understanding in geometry questions". In: *Proceedings of AAAI*. 2014.
- [1] David Moore, Kevin Mayeda, Steve Myers, Minjoon Seo, and Stuart Russell. "Progress in signal-based bayesian monitoring". In: *Proceedings of the 2012 monitoring research review: ground-based nuclear explosion monitoring technologies.* 2012.

## **Employment**

## Allen Institute for Artificial Intelligence

Research Intern (advisers: Ani Kembhavi, Ali Farhadi)

Jun – Sep 2016

Devised a deep learning model for machine comprehension task that uses bi-attention flow to effectively link and fuse information from both context paragraph and question [6]. It achieved the state-of-the-art results on Stanford Question Answering Dataset (SQuAD) test data, as of Nov 28, 2016. Details in allenai.github.io/bi-att-flow.

#### Allen Institute for Artificial Intelligence

Mar - Jun 2015, Jun - Sep 2014

Research Intern (advisers: Ali Farhadi, Oren Etzioni)

Participated in Project Euclid and devised an end-to-end system that solves geometry problems in college entrance

exam (SAT) with SAT score of 49% [4]. Also worked on the project as a research assistant in University of Washington. Details in geometry.allenai.org.

#### 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 with accuracy of 95%.

#### Oracle Corporation @ Santa Clara, United States

Aug 2012 - May 2013

Software Engineer

Developed tools for verifying the operating system of Oracle's switches.

#### Symantec Corporation @ Mountain View, United States

May 2011 – Aug 2011

Software Engineering Intern

Developed tools for debugging Semantic Enterprise Protection.

#### Honors and Awards

- Best Paper Nomination [3], UbiComp 2014
- Graduated with Highest Honors (Summa cum Laude), UC Berkeley, 2012

## **Invited Talks**

- University of Washington / Microsoft Research NLP Symposium @ Seattle, United States (2 Dec 2016)
- Samsung AI Lab @ Seoul, Korea (29 Sep 2016)
- SK T-Brain @ Seoul, Korea (21 Sep 2016)

## Services

- Reviewer: NIPS (2016), ACL (2016), NAACL-HLT SRW (2016)
- Subreviewer: EMNLP (2016), ECCV (2016), AAAI (2014, 2015, 2016)
- Teaching Assistant: Graduate Natural Language Processing (Wi 2017)
- Ph.D. Admission Committee Student Reader (2017)

## Graduate Coursework

Natural Language Processing; Advanced Natural Language Processing; Machine Learning; Probabilistic Graphical Models; Artificial Intelligence; Computer Vision; Applied Algorithms; Approximation Algorithms; Computer-aided Reasoning (Programming Language); Database Management System;

## References

#### Hannaneh Hajishirzi

Assistant Research Professor, University of Washington hannaneh@washington.edu

#### Ali Farhadi

Assistant Professor, University of Washington ali@cs.washington.edu

## Oren Etzioni

Chief Executive Officer, Allen Institute for Artificial Intelligence  ${\tt orene@allenai.org}$