# **Sewon Min**

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# **Education**

09/2018–Current Ph.D. student, Computer Science & Engineering, University of Washington

Supervisors: Hannaneh Hajishirzi, Luke Zettlemoyer

03/2020 M.Sc., Computer Science & Engineering, University of Washington

03/2014–08/2018 B.Sc., Computer Science & Engineering, Seoul National University

Summa Cum Laude, Rank: 1st in the department

02/2011–02/2014 Gyeonggi Science High School

# **Employment**

09/2018–Current Research Assistant, University of Washington

Supervisors: Hannaneh Hajishirzi, Luke Zettlemoyer

04/2021–Current, Visiting researcher, Meta AI (formerly Facebook AI Research)

10/2019–08/2020 Host: Luke Zettlemoyer

09/2020–03/2021 Research Intern/Student researcher, Google AI Research

Hosts: Kenton Lee, Kristina Toutanova / Collaborator: Ming-Wei Chang

11/2017–02/2018 Research Intern, Salesforce Research (formerly Metamind)

Host: Caiming Xiong

10/2016–02/2017 Undergraduate Research Assistant, University of Washington

Supervisor: Hannaneh Hajishirzi

07/2016–08/2016 Undergraduate Intern, Vision & Learning Lab, Seoul National University

Supervisor: Gunhee Kim

## **Publications**

GScholar https://scholar.google.com/citations?user=jU4IZs4AAAAJ Semantic Scholar https://www.semanticscholar.org/author/Sewon-Min/48872685

### Peer-Reviewed Conference/Journal Papers

- [C22] Zeqiu Wu, Ryu Parish, Hao Cheng, **Sewon Min**, Prithviraj Ammanabrolu, Mari Ostendorf, Hannaneh Hajishirzi. "INSCIT: Information-Seeking Conversations with Mixed-Initiative Interactions." In: *TACL (Conditionally Accepted)*. 2022. [pdf]
- [C21] Chenglei Si, Chen Zhao, **Sewon Min**, Jordan Boyd-Graber. "Re-Examining Calibration: The Case of Question Answering." In: *Proceedings of Findings of EMNLP (long)*. 2022. [pdf]
- [C20] Anas Awadalla, Mitchell Wortsman, Gabriel Ilharco, **Sewon Min**, Hannaneh Hajishirzi, Ludwig Schmidt. "Exploring The Landscape of Distributional Robustness for Question Answering Models." In: *Proceedings of Findings of EMNLP (long)*. 2022. [pdf]
- [C19] **Sewon Min**, Xinxi Lyu, Ari Holtzman, Mikel Artetxe, Mike Lewis, Hannaneh Hajishirzi, Luke Zettlemoyer. "Rethinking the Role of Demonstrations: What makes In-context Learning Work?" In: *Proceedings of EMNLP (long)*. 2022. [pdf]
- [C18] Daniel Khashabi, Xinxi Lyu, **Sewon Min**, Lianhui Qin, Kyle Richardson, Sameer Singh, Sean Welleck, Hannaneh Hajishirzi, Tushar Khot, Ashish Sabharwal, Yejin Choi. "Prompt Waywardness: The Curious Case of Discretized Interpretation of Continuous Prompts." In: *Proceedings of NAACL-HLT (long)*. 2022. [pdf]
- [C17] **Sewon Min**, Mike Lewis, Luke Zettlemoyer, Hannaneh Hajishirzi. "MetaICL: Learning to Learn In Context." In: *Proceedings of NAACL-HLT (long)*. 2022. [pdf]
- [C16] **Sewon Min**, Mike Lewis, Hannaneh Hajishirzi, Luke Zettlemoyer. "Noisy Channel Language Model Prompting for Few-Shot Text Classification." In: *Proceedings of ACL (long)*. 2022. [pdf]
- [C15] Jungsoo Park\*, **Sewon Min**\*, Jaewoo Kang, Luke Zettlemoyer, Hannaneh Hajishirzi. "FAVIQ: FAct Verification from Information-seeking Questions." In: *Proceedings of ACL (long)*. 2022. [pdf]
- [C14] Sewon Min, Kenton Lee, Ming-Wei Chang, Kristina Toutanova, Hannaneh Hajishirzi. "Joint Passage Ranking for Diverse Multi-Answer Retrieval." In: *Proceedings of EMNLP (long)*. 2021. [pdf]
- [C13] **Sewon Min**, Jordan Boyd-Graber, Chris Alberti, Danqi Chen, Eunsol Choi, Michael Collins, Kelvin Guu, Hannaneh Hajishirzi, Kenton Lee, Jennimaria Palomaki, Colin Raffel, Adam Roberts, Tom Kwiatkowski (with EfficientQA participants). "NeurIPS 2020 EfficientQA Competition: Systems, Analyses and Lessons Learned." In: *Proceedings of Maching Learning Research (PMLR)*. 2021. [pdf]
- [C12] Srinivasan Iyer, **Sewon Min**, Yashar Mehdad, Wen-tau Yih. "ReConsider: Re-Ranking using Span-Focused Cross-Attention for Open Domain Question Answering." In: *Proceedings of NAACL-HLT (short)*. 2021. [pdf]
- [C11] Belinda Z. Li, **Sewon Min**, Srinivasan Iyer, Yashar Mehdad and Wen-tau Yih. "Efficient One-Pass End-to-End Entity Linking for Questions." In: *Proceedings of EMNLP (short)*. 2020.

[pdf]

- [C10] **Sewon Min**, Julian Michael, Hannaneh Hajishirzi, Luke Zettlemoyer. "AmbigQA: Answering Ambiguous Open-domain Questions." In: *Proceedings of EMNLP (long)*. 2020. [pdf]
- [C9] Vladimir Karpukhin\*, Barlas Oguz\*, Sewon Min, Patrick Lewis, Ledell Wu, Sergey Edunov, Danqi Chen, Wen-tau Yih. "Dense Passage Retrieval for Open-domain Question Answering." In: *Proceedings of EMNLP (long)*. 2020. [pdf]
- [C8] Daniel Khashabi, **Sewon Min**, Tushar Khot, Ashish Sabharwal, Oyvind Tafjord, Peter Clark and Hannaneh Hajishirzi. "UnifiedQA: Crossing Format Boundaries With a Single QA System." In: *Proceedings of Findings of EMNLP (long)*. 2020. [pdf]
- [C7] Sewon Min, Danqi Chen, Hannaneh Hajishirzi, Luke Zettlemoyer. "A Discrete Hard EM Approach for Weakly Supervised Question Answering." In: *Proceedings of EMNLP (long)*. 2019. [pdf]
- [C6] **Sewon Min**, Victor Zhong, Luke Zettlemoyer, Hannaneh Hajishirzi. "Multi-hop Reading Comprehension through Question Decomposition and Rescoring." In: *Proceedings of ACL (long)*. 2019. [pdf]
- [C5] **Sewon Min\***, Eric Wallace\*, Sameer Singh, Matt Gardner, Hannaneh Hajishirzi, Luke Zettlemoyer. "Compositional Questions Do Not Necessitate Multi-hop Reasoning." In: *Proceedings of ACL (short)*. 2019. [pdf]
- [C4] Sewon Min, Victor Zhong, Richard Socher, Caiming Xiong. "Efficient and Robust Question Answering from Minimal Context over Documents." In: *Proceedings of ACL (long)*. 2018.
  [pdf]
- [C3] Minjoon Seo\*, **Sewon Min**\*, Ali Farhadi, Hannaneh Hajishirzi. "Neural Speed Reading via Skim-RNN." In: *Proceedings of ICLR*. 2018. [pdf]
- [C2] **Sewon Min**, Minjoon Seo, Hannaneh Hajishirzi. "Question Answering through Transfer Learning from Large Fine-grained Supervision Data." In: *Proceedings of ACL (short)*. 2017. [pdf]
- [C1] Minjoon Seo, **Sewon Min**, Ali Farhadi, Hannaneh Hajishirzi. "Query-Reduction Networks for Question Answering." In: *Proceedings of ICLR*. 2017. [pdf]

#### **Tutorials**

- [T2] Iz Beltagy, Arman Cohan, Robert L. Logan IV, **Sewon Min**, Sameer Singh. "Zero- and Few-Shot NLP with Pretrained Language Models." *ACL (Tutorial)*. 2022. [pdf]
- [T1] Iz Beltagy, Arman Cohan, Hannaneh Hajishirzi, **Sewon Min**, Matthew E. Peters. "Beyond Paragraphs: NLP for Long Sequences." *NAACL-HLT (Tutorial)*. 2021. [pdf]

### **Peer-Reviewed Workshop Papers**

[W1] Matt Gardner, Jonathan Berant, Hannaneh Hajishirzi, Alon Talmor, **Sewon Min**. "On Making Reading Comprehension More Comprehensive." In: *Proceedings of Workshop on Machine* 

#### **Preprints**

- [P5] **Sewon Min**, Weijia Shi, Mike Lewis, Xilun Chen, Wen-tau Yih, Hannaneh Hajishirzi, Luke Zettlemoyer. "Nonparametric Masked Language Modeling." *arXiv preprint*. 2022. [pdf]
- [P4] Xinyan Velocity Yu, **Sewon Min**, Luke Zettlemoyer, Hannaneh Hajishirzi. "CREPE: Open-Domain Question Answering with False Presuppositions." *arXiv preprint*. 2022. [pdf]
- [P3] Ofir Press, Muru Zhang, **Sewon Min**, Ludwig Schmidt, Noah A. Smith, Mike Lewis. "Measuring and Narrowing the Compositionality Gap in Language Models." *arXiv preprint*. 2022. [pdf]
- [P2] **Sewon Min**, Danqi Chen, Luke Zettlemoyer, Hannaneh Hajishirzi. "Knowledge Guided Text Retrieval and Reading for Open Domain Question Answering." *arXiv preprint*. 2019. [pdf]
- [P1] Matt Gardner, Jonathan Berant, Hannaneh Hajishirzi, Alon Talmor, **Sewon Min**. "Question Answering is a Format; When is it Useful?." *arXiv preprint*. 2019. [pdf]

## **Honors and Awards**

2022	EECS Rising Stars
2022–2023	JP Morgan Ph.D. Fellowship
2018–2023	Doctoral Study Fellowship granted by Korea Foundation for Advanced Studies (KFAS)
2018–2019	Wissner-Slivka Endowed Graduate Fellowship granted by Paul G. Allen School
2018	Best Undergraduate Thesis Award granted by CSE, Seoul National University
2014–2018	Full Scholarship for all semesters attended at Seoul National University (merit-based)
2018	ICLR Travel Award
2017, 2018	Google Travel Grants
2017	Internship Abroad Support Fund granted by Seoul National University
2017	Samsung Convergence Software Course Mentor Scholarship

## **Professional Services**

# Workshop Co-organizer

*CL 2023 (Submitted)	The 4th Workshop on Machine Reading for Question Answering (MRQA)
ACL 2022	The 7th Workshop on Representation Learning for NLP (Repl4NLP)
ACL 2022	Semiparametric Methods in NLP: Decoupling Logic from Knowledge (Spa-NLP)

EMNLP 2021	The 3rd Workshop on Machine Reading for Question Answering (MRQA)
AKBC 2021	The 2nd Workshop on Unstructured and Structured KBs (USKB)
NeurIPS 2020	Competition on Efficient Open-Domain Question Answering (EfficientQA)
AKBC 2020	Workshop on Unstructured and Structured KBs (USKB)

#### **Area Chair**

COLING 2022 Inference and Question Answering track

### **Reviewer/Program Committee**

† denotes outstanding reviewer

#### Journals:

- Transactions of the Association for Computational Linguistics (TACL): 2022
- Transactions on Machine Learning Research (TMLR): 2022

#### \*CL/NLP conferences:

- ACL: 2019, 2020, 2021<sup>†</sup>
- EMNLP: 2019<sup>†</sup>, 2020, 2021<sup>†</sup>, 2022
- AKBC: 2019, 2020, 2021, 2022
- AACL: 2020
- NAACL: 2021
- ACL Rolling Review: 2021-

#### ML/AI conferences/journals:

- NeurIPS: 2018, 2020, 2021, 2022
- ICLR: 2019, 2020, 2021, 2022, 2023
- AAAI: 2020, 2021
- ICML: 2021

#### Workshops:

- Student Research Workshop: ACL 2019, ACL 2020, AACL 2020, EACL 2021, NAACL 2021, ACL 2021
- Workshop on Knowledge Retrieval and Language Models: ICML 2022
- Workshop on NLP for Positive Impact: ACL 2021, EMNLP 2022
- The 2nd Workshop on Machine Reading for Question Answering: EMNLP 2019

Competition Track, NeurIPS 2021

#### **Departmental Service**

2021, 2022	UW CSE: Admission Committee Member for the Ph.D. Program
2021	UW NLP: Student co-organizer of the Invited Talk Series
2021	UW NLP: Student co-organizer of the NLP Retreat
2019	UW CSE: Prospective Student Committee Co-Chair for the Ph.D. Program

## **Invited Talks**

12/2022 Data Science & Business Analytics Lab, Korea University Title: Open-domain, Open-ended Question Answering Host: Pilsung Kang 10/2022 ISI NL Seminar, University of Southern California Title: Understanding and Improving Learning through Inference with Large Language Models Host: Jonathan May 07/2022 MLOPT Research Group, University of Wisconsin-Madison Title: Understanding and Improving Learning through Inference with Large Language Models Host: Kangwook Lee 04/2022 Language & Intelligence Lab, MIT Title: Understanding and Improving Learning through Inference with Large Language Models Host: Jacob Andreas 12/2021 Hyundai AIRS Title: Learning from limited data at inference time Host: Cheoneum Park Facebook AI 10/2021 Title: Learning from limited data at inference time Host: Zornitsa Kozareva 08/2021 AI Summer School, Seoul National University Title: Toward Real-world Natural Language Understanding Host: Hyun Oh Song 08/2021 Summer AI Seminar Series, Postech Title: Toward Real-world Natural Language Understanding Host: Gary Geunbae Lee 04/2021 Colloquium Talk, Graduate School of AI at KAIST Title: Answering Open-domain, Information-seeking Questions from Text Host: Juho Lee 02/2021 School of Electronic Engineering at KAIST Title: Answering Open-domain, Information-seeking Questions from Text Host: Sung-Ju Lee 09/2020 Apple (Web Answers team) Hosts: Chris DuBois and Shayne Longpre 08/2020 Facebook NLP Summit, Question Answering Workshop Host: Yashar Mehdad Kakao Brain 08/2018 Host: Benjamin Lee

08/2018 Samsung Advanced Institute of Technology

Host: Jehun Jeon

08/2017 NAVER

Host: Sung Kim

# **Teaching**

#### **Tutorial Co-instructor**

\*CL 2023 (Submitted) Retrieval-based Language Models and Applications

with Akari Asai, Zexuan Zhong and Danqi Chen

ACL 2022 Zero- and Few-Shot NLP with Pretrained Language Models

with Iz Beltagy, Arman Cohan, Sameer Singh and Robert Logan

NAACL-HLT 2021 Beyond Paragraphs: NLP for Long Sequences

with Iz Beltagy, Arman Cohan, Hannaneh Hajishirzi and Matthew E. Peters

## **Teaching Assistant**

Spring 2022 CSE 573 Artificial Intelligence, University of Washington

Instructor: Hannaneh Hajishirzi

In addition to typical TA role, gave guest lectures and made assignments

Winter 2021 CSE 447+517 Natural Language Processing, University of Washington

Instructor: Noah Smith

In addition to typical TA role, oversaw the 517 Reproducibility Project and

guided submissions to the ML Reproducibility Challenge

## **Student Mentoring**

12/2021–Current	Xinyan (Velocity) Yu, BS→MS student at UW
09/2021–Current	Xinxi (Shane) Lyu, BS→MS student at UW
06/2021-12/2021	Skyler Hallinan, BS $ ightarrow$ MS student at UW
01/2021-07/2021	Jungsoo Park, MS student at Korea University; now at NAVER
02/2020-08/2020	Belinda Li, software engineer at Facebook; now a PhD student at MIT