Sewon Min

Paul G. Allen School of Computer Science & Engineering Home: http://shmsw25.github.io/

University of Washington Email: sewon@cs.washington.edu

185 NE Stevens Way Github: /shmsw25
Seattle, WA 98195 Skype: shmsw25

Education

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

Supervisors: Hannaneh Hajishirzi, Luke Zettlemoyer

Dissertation Committee: Hannaneh Hajishirzi (Co-Chair), Luke Zettlemoyer (Co-

Chair), Noah Smith, Shane Steinert-Threlkeld, Graham Neubig

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

06/2023–12/2023, Visiting researcher/research intern, Meta AI (Facebook AI Research)

04/2021–03/2023 Host: Luke Zettlemoyer

10/2019-08/2020

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

- [C26] Boshi Wang, Sewon Min, Xiang Deng, Jiaming Shen, You Wu, Luke Zettlemoyer, Huan Sun. "Towards Understanding Chain-of-Thought Prompting: An Empirical Study of What Matters." In: *Proceedings of ACL (long)*. 2023. [pdf]
- [C25] Xinxi Lyu, **Sewon Min**, Iz Beltagy, Luke Zettlemoyer, Hannaneh Hajishirzi. "Z-ICL: Zero-Shot In-Context Learning with Pseudo-Demonstrations." In: *Proceedings of ACL (long)*. 2023. [pdf]
- [C24] **Sewon Min**, Weijia Shi, Mike Lewis, Xilun Chen, Wen-tau Yih, Hannaneh Hajishirzi, Luke Zettlemoyer. "Nonparametric Masked Language Modeling." In: *Proceedings of Findings of ACL (long)*. 2023. [pdf]
- [C23] Xinyan Velocity Yu, **Sewon Min**, Luke Zettlemoyer, Hannaneh Hajishirzi. "CREPE: Open-Domain Question Answering with False Presuppositions." In: *Proceedings of ACL (long)*. 2023. [pdf]
- [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*. 2023. [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

[T3] Akari Asai, **Sewon Min**, Zexuan Zhong, Danqi Chen. "Retrieval-based Language Models and Applications." *ACL (Tutorial)*. 2023. [pdf]

- [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 Reading for Question Answering (MRQA) @ EMNLP*. 2019. [pdf]

Preprints

- [P5] **Sewon Min***, Kalpesh Krishna*, Xinxi Lyu, Mike Lewis, Wen-tau Yih, Pang Wei Koh, Mohit Iyyer, Luke Zettlemoyer, Hannaneh Hajishirzi. "FActScore: Fine-grained Atomic Evaluation of Factual Precision in Long Form Text Generation." *arXiv preprint.* 2023. [pdf]
- [P4] Weijia Shi, **Sewon Min**, Michihiro Yasunaga, Minjoon Seo, Rich James, Mike Lewis, Luke Zettlemoyer, Wen-tau Yih. "REPLUG: Retrieval-Augmented Black-Box Language Models." *arXiv preprint*. 2023. [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

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 ACL 2023, EMNLP 2023, COLING 2022

Reviewer/Program Committee

Journals:

- Transactions of the Association for Computational Linguistics (TACL; 2022–)
- Transactions on Machine Learning Research (TMLR; 2022–)
- Journal of Artificial Intelligence Research (JAIR; 2023)

Conferences: († *denotes outstanding reviewer*)

• ACL (2019, 2020, 2021 [†])	• NeurIPS (2018, 2020, 2021, 2022)
• EMNLP (2019 [†] , 2020, 2021 [†] , 2022)	• ICLR (2019, 2020, 2021, 2022, 2023)
• NAACL (2021)	• ICML (2021, 2023)
• AACL (2020)	• AAAI (2020, 2021)
• ACL Rolling Review (2021, 2022)	• AKBC (2019, 2020, 2021, 2022)

Workshops:

- Workshop on Retrieval-Enhanced Machine Learning: SIGIR 2023
- Workshop on Mathematical and Empirical Understanding of Foundation Models: ICLR 2023
- Workshop on Knowledge Retrieval and Language Models: ICML 2022
- Student Research Workshop: ACL 2019, ACL 2020, AACL 2020, EACL 2021, NAACL 2021, ACL 2021
- 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

2021–2023	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

12/2023 (Expected)	Big Picture Workshop at EMNLP 2023 Title: The Role of Labels for In-Context Learning, and Best Practices for Learning with Demonstrations
06/2023	Microsoft Semantic Machines (Host: Hao Fang) Title: FActScore: Fine-grained Atomic Evaluation of Factual Precision in Long Form Text Generation
03/2023	Gradient Podcast Interview (Host: Daniel Bashir)
02/2023	Conversation & Reasoning Group, Meta (Host: Zhe Zhang) Title: Nonparametric Masked Language Modeling
12/2022	Data Science & Business Analytics Lab, Korea University (Host: Pilsung Kang) Title: Open-domain, Open-ended Question Answering
10/2022	ISI NL Seminar, University of Southern California (Host: Jonathan May) Title: Understanding and Improving Learning through Inference with Large Language Models
07/2022	MLOPT Research Group, University of Wisconsin–Madison (Host: Kangwook Lee) Title: <i>Understanding and Improving Learning through Inference with Large Language Models</i>
04/2022	Language & Intelligence Lab, MIT (Host: Jacob Andreas) Title: Understanding and Improving Learning through Inference with Large Language Models
12/2021	Hyundai AIRS (Host: Cheoneum Park) Title: Learning from limited data at inference time
10/2021	Facebook AI (Host: Zornitsa Kozareva) Title: Learning from limited data at inference time
08/2021	AI Summer School, Seoul National University (Host: Hyun Oh Song) Title: Toward Real-world Natural Language Understanding
08/2021	Summer AI Seminar Series, Postech (Host: Gary Geunbae Lee) Title: Toward Real-world Natural Language Understanding
04/2021	Colloquium Talk, Graduate School of AI at KAIST (Host: Juho Lee) Title: Answering Open-domain, Information-seeking Questions from Text
02/2021	School of Electronic Engineering at KAIST (Host: Sung-Ju Lee) Title: Answering Open-domain, Information-seeking Questions from Text
09/2020	Apple (Hosts: Chris DuBois and Shayne Longpre)
08/2020	Facebook NLP Summit, Question Answering Workshop (Host: Yashar Mehdad)
08/2018	Kakao Brain (Host: Benjamin Lee)
08/2018	Samsung Advanced Institute of Technology (Host: Jehun Jeon)
08/2017	NAVER (Host: Sung Kim)

Teaching

Tutorial Co-instructor

ACL 2023 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

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

Instructor: Noah Smith

Guest Lecturer

Winter 2023 CSE 447 Natural Language Processing, University of Washington

Instructor: Sofia Serrano

Topic: Zero- and Few-shot NLP with Pretrained Language Models

Winter 2023 CSE 573 Artificial Intelligence, University of Washington

Instructor: Hannaneh Hajishirzi

Spring 2022 CSE 573 Artificial Intelligence, University of Washington

Instructor: Hannaneh Hajishirzi

Predoctoral Student Mentoring

01/2023–Current Michael Duan, BS student at UW

09/2021–Current Xinxi (Shane) Lyu, BS→MS student at UW → predoctoral young investigator

at Allen Institute for AI

12/2021–12/2022 Xinyan (Velocity) Yu, BS→MS student at UW, now AI resident at Meta AI

06/2021–12/2021 Skyler Hallinan, BS→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