Sewon Min

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

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

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Seattle, WA 98195 Skype: shmsw25

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

| 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[†]

• EMNLP: 2019[†], 2020, 2021[†], 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

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 |