

EDUCATION	University of Washington , Seattle, Washington	September 2019 - Present
	Ph.D. Student, Computer Science and Engineering Advisor: Prof. Hannaneh Hajishirzi	
	The University of Tokyo , Tokyo, Japan	March 2019
	B.E. in Information and Communication Engineering Thesis Advisor: Kiyoharu Aizawa Major GPA: 3.90/4, Cumulative GPA: 3.83/4; 1st rank in class (1/133), Dean's Award	
	University of California, Berkeley , Berkeley, California	August 2015 - May 2016
	American and International Study Program (AISP) at Department of Political Science	
EMPLOYMENT	University of Washington	Sep 2019-Present, Seattle, WA
	<i>Ph.D. Student (Supervisor: Hannaneh Hajishirzi)</i>	
	Meta AI	
	<i>Research Intern (Supervisors: Sebastian Riedel, Scott Yih)</i>	Jul 2022-Jan 2023, Seattle, WA
	<i>Visiting Student Researcher (Present; Supervisor: Scott Yih)</i>	Sep 2023-Present, Seattle, WA
	Allen Institute for AI	Jul 2021-Dec 2021, Seattle, WA
	<i>Research Intern (Supervisors: Hannaneh Hajishirzi, Matt Gardner)</i>	
	Salesforce Research	Apr 2019-Aug 2019, Palo Alto, CA
	<i>Research Intern (Supervisors: Kazuma Hashimoto, Caiming Xiong)</i>	
	Microsoft Research Asia	Sep 2018-Jan 2019, Beijing, China
	<i>Research Intern (Supervisors: Duyu Tang, Nan Duan)</i>	
	Aizawa Yamasaki Lab, The University of Tokyo	Apr 2018-Mar 2019, Tokyo, Japan
	<i>Thesis Student (Supervisor: Kiyoharu Aizawa)</i>	
	Studio Ousia	Mar 2018-Mar 2019, Tokyo, Japan
	<i>Research Intern (Supervisor: Ikuya Yamada)</i>	
	Tsuruoka Lab, The University of Tokyo	Dec 2017-Mar 2019, Tokyo, Japan
	<i>Research Assistant (Supervisor: Yoshimasa Tsuruoka)</i>	
	Google , Google Chrome Blink team	Aug-Oct 2017, Tokyo, Japan
	<i>Engineering Intern</i>	
	Megagon Labs	Mar-Apr, 2017, Tokyo, Japan
	<i>Research Intern (Supervisor: Alon Y. Halevy)</i>	
	Google , iGSA (Google Search iOS) team	Jun-Oct 2016, Tokyo, Japan
	<i>Engineering Intern</i>	
SELECTED AWARDS & GRANT	Best Paper Honorable Mention at NeurIPS 2023 Instruction Workshop	2023
	ACL 2023 Best Video Award	2023
	Microsoft Accelerate Foundation Models Research	2023
	Stability AI HPC Cluster Research Grant	2023
	EECS Rising Stars	2022
	IBM PhD Fellowship	2022
	The Dean's Award, The Best Bachelor Thesis Award, The University of Tokyo	2019
	The Nakajima Foundation Scholarship (Doctoral Study Abroad Program Fellowship)	2018
	Women Techmakers Scholarship (Google Anita Borg Memorial Scholarship) Scholar	2017
PUBLICATIONS	[1] BUFFET: Benchmarking Large Language Models for Few-shot Cross-lingual Transfer.	
	Akari Asai, Sneha Kudugunta, Xinyan Velocity Yu, Terra Blevins, Hila Gonen, Machel Reid, Yulia Tsvetkov, Sebastian Ruder, Hannaneh Hajishirzi	

Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2024.

- [2] Self-RAG: Learning to Retrieve, Generate, and Critique through Self-Reflection.
Akari Asai, Zeqiu Wu, Yizhong Wang, Avirup Sil, Hannaneh Hajishirzi
International Conference on Learning Representations (ICLR; oral – top1%), 2024
Best Paper Honorable Mention at *Instruction Workshop at NeurIPS*, 2023.
- [3] RealTime QA: What’s the Answer Right Now?.
Jungo Kasai, Keisuke Sakaguchi, Yoichi Takahashi, Ronan Le Bras, **Akari Asai**, Xinyan Yu, Dragomir Radev, Noah A. Smith, Yejin Choi, Kentaro Inui
NeurIPS (Datasets and Benchmarks), 2023.
- [4] TaskWeb: Selecting Better Source Tasks for Multi-task NLP.
Joongwon Kim, **Akari Asai**, Gabriel Ilharco, Hannaneh Hajishirzi.
Conference on Empirical Methods in Natural Language Processing (EMNLP), 2023.
- [5] How to Train Your DRAGON: Diverse Augmentation Towards Generalizable Dense Retrieval.
Sheng-Chieh Lin, **Akari Asai**, Minghan Li, Barlas Oguz, Jimmy Lin, Yashar Mehdad, Wen-tau Yih, Xilun Chen.
Findings of EMNLP, 2022.
- [6] AfriQA: Cross-lingual Open-Retrieval Question Answering for African Languages.
Odunayo Ogundepo, Tajuddeen R. Gwadabe, Clara E. Rivera, Jonathan H. Clark, Sebastian Ruder, David Ifeoluwa Adelani, Bonaventure F. P. Dossou, ..., **Akari Asai** (52 authors).
Findings of EMNLP, 2022.
- [7] When Not to Trust Language Models: Investigating Effectiveness and Limitations of Parametric and Non-Parametric Memories.
Alex Mallen*, **Akari Asai***, Victor Zhong, Rajarshi Das, Hannaneh Hajishirzi, Daniel Khashabi
The Annual Conference of the Association for Computational Linguistics (ACL; oral), 2023.
ACL 2023 Best Video Award.
- [8] Task-aware Retrieval with Instructions.
Akari Asai, Timo Schick, Patrick Lewis, Xilun Chen, Gautier Izacard, Sebastian Riedel, Hannaneh Hajishirzi, Wen-tau Yih
Findings of ACL, 2023.
- [9] xPQA: Cross-Lingual Product Question Answering across 12 Languages.
Xiaoyu Shen, **Akari Asai**, Bill Byrne, Adrià de Gispert
The Annual Conference of the Association for Computational Linguistics (ACL; Industry track), 2023.
- [10] Attentional Mixtures of Soft Prompt Tuning for Parameter-efficient Multi-task Knowledge Sharing.
Akari Asai, Mohammadreza Salehi, Matthew E. Peters, and Hannaneh Hajishirzi.
Conference on Empirical Methods in Natural Language Processing (EMNLP), 2022.
- [11] Beyond Counting Datasets: Investigating Multilingual Dataset Construction and Necessary Resources.
Xinyan Yu*, **Akari Asai***, Trina Chatterjee, Junjie Hu, Eunsol Choi.
Findings of EMNLP, 2022.
- [12] MIA 2022 Shared Task: Evaluating Cross-lingual Open-Retrieval Question Answering for 16 Diverse Languages.
Akari Asai, Shayne Longpre, Jungo Kasai, Chia-Hsuan Lee, Rui Zhang, Junjie Hu, Ikuya Yamada, Jonathan H. Clark, Eunsol Choi
Workshop on Multilingual Information Access (MIA), 2022.
- [13] Evidentiality-guided Generation for Knowledge-Intensive NLP Tasks.
Akari Asai, Matt Gardner, and Hannaneh Hajishirzi
Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL; oral), 2022.
- [14] One Question Answering Model for Many Languages with Cross-lingual Dense Passage Retrieval.
Akari Asai, Xinyan Yu, Jungo Kasai, and Hannaneh Hajishirzi.
Conference on Neural Information Processing Systems (NeurIPS), 2021.
- [15] Challenges in Information Seeking QA: Unanswerable Questions and Paragraph Retrieval.
Akari Asai and Eunsol Choi.
The Annual Conference of the Association for Computational Linguistics (ACL), 2021.

[16] Efficient Passage Retrieval with Hashing for Open-domain Question Answering.
Ikuya Yamada, **Akari Asai** and Hannaneh Hajishirzi.
The Annual Conference of the Association for Computational Linguistics (ACL), 2021.

[17] XOR QA: Cross-lingual Open-Retrieval Question Answering.
Akari Asai, Jungo Kasai, Jonathan H. Clark, Kenton Lee, Eunsol Choi, and Hannaneh Hajishirzi.
Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL; oral), 2021.

[18] MultiModalQA: complex question answering over text, tables and images.
Alon Talmor, Ori Yoran, Amnon Catav, Dan Lahav, Yizhong Wang, **Akari Asai**, Gabriel Ilharco, Hannaneh Hajishirzi, Jonathan Berant.
International Conference on Learning Representations (ICLR), 2021.

[19] LUKE: Deep Contextualized Entity Representations with Entity-aware Self-attention.
Ikuya Yamada, **Akari Asai**, Hiroyuki Shindo, Hideaki Takeda, and Yuji Matsumoto.
Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020.

[20] Wikipedia2Vec: An Optimized Tool for Learning Embeddings of Words and Entities from Wikipedia.
Ikuya Yamada, **Akari Asai**, Jin Sakuma, Hiroyuki Shindo, Hideaki Takeda, Yoshiyasu Takefuji, and Yuji Matsumoto.
Conference on Empirical Methods in Natural Language Processing (EMNLP, demo), 2020.

[21] Logic-guided Data Augmentation and Regularization for Consistent Question Answering.
Akari Asai and Hannaneh Hajishirzi.
The Annual Conference of the Association for Computational Linguistics (ACL), 2020.

[22] Learning to Retrieve Reasoning Paths over Wikipedia Graphs for Question Answering
Akari Asai, Kazuma Hashimoto, Hannaneh Hajishirzi, Richard Socher, and Caiming Xiong.
International Conference on Learning Representations (ICLR), 2020.

BEFORE PH.D. [23] The Aleatoric Uncertainty Estimation Using a Separate Formulation with Virtual Residuals.
Takumi Kawashima, Qing Yu, **Akari Asai**, Daiki Ikami, Kiyoharu Aizawa.
International Conference on Pattern Recognition (ICPR), 2020.

[24] Multi-task Learning Based on Separable Formulation of Depth Estimation and Uncertainty.
Akari Asai, Daiki Ikami, and Kiyoharu Aizawa.
Conference on Computer Vision and Pattern Recognition (CVPR), Uncertainty and Robustness in Deep Visual Learning, 2019.

[25] HappyDB: A Corpus of 100,000 Crowdsourced Happy Moments
Akari Asai, Sara Evensen, Behzad Golshan, Alon Halevy, Vivian Li, Andrei Lopatenko, Daniela Stepanov, Yoshihiko Suhara, Wang-Chiew Tan, and Yinzhan Xu.
International Conference on Language Resources and Evaluation (LREC), 2018.

[26] A Data-Driven Approach to Understanding Happiness
Akari Asai, Vivian Li, Daniela Stepanov, and Wang-Chiew Tan.
ACL Widening NLP Workshop, 2017.

PREPRINTS [27] Fine-grained Hallucination Detection and Editing for Language Models.
Abhika Mishra, **Akari Asai**, Vidhisha Balachandran, Yizhong Wang, Graham Neubig, Yulia Tsvetkov, Hannaneh Hajishirzi
Arxiv Preprint, 2024.

[28] Inferential Text Generation with Multiple Knowledge Sources and Meta-Learning.
Daya Guo*, **Akari Asai***, Duyu Tang, Nan Duan, Ming Gong, Linjun Shou, Daxin Jiang, Jian Yin, and Ming Zhou.
Arxiv Preprint, 2020.

[29] Multilingual Extractive Reading Comprehension by Runtime Machine Translation.
Akari Asai, Akiko Eriguchi, Kazuma Hashimoto, and Yoshimasa Tsuruoka.
Arxiv Preprint, 2018

TEACHING **Courses:**
EXPERIENCE Head TA / Co-instructor, CSE599J Data-centric ML, University of Washington Winter 2024
Head TA, CSE473 Artificial Intelligence, University of Washington Fall 2023

Tutorial Instructor:

Tutorial on Retrieval-based LMs and Applications, ACL

July 2023

Guest Lectures for Courses:

CPSC 477/577 Natural Language Processing, Yale University

Mar 2024

CSE 447 Natural Language Processing, University of Washington

Mar 2024

CSE 473 Introduction to Artificial Intelligence, University of Washington

Oct 2023

CSE 447 Natural Language Processing, University of Washington

Mar 2023

CSE 373 Data Structures and Algorithm, University of Washington

Dec 2022

SERVICES

Department:

Ph.D. Admission Committee Member (2021, 2022)

Ph.D. Admission NLP Student Area Chair (2021, 2022)

Diversity and Inclusion Committee Representative (2022-Present)

UW NLP Seminar Organizer (2023-2024)

Workshop and Conference Organization:

Lead Organizer of Workshop on Multilingual Information Access (MIA), NAACL 2022

Shared-task Lead Organizer MIA 2022 Shared task, NAACL 2022.

Student Volunteer Coordinator, NAACL 2022.

Area Chair:

EACL 2023 (Question Answering)

EMNLP 2023 (Question Answering)

Reviewer/Program Committee:

ACL 2020-2023

EMNLP 2019-2023

ARR 2021-Present.

NeurIPS 2021-2023

ICLR 2021-2024

AKBC 2020

AAAI 2020

IJCAI 2021

Outreach:

Weekly Virtual Office hour, offering weekly 1 hour office hours open to public (Mar 2022-Present).

UW CSE Ph.D. Pre-Application Mentorship Service (2022)

Organizer of Todai Girls Hackathon 2017

Panel at Mind The Gap (Google, Aug 2016 / Sept 2017, Tokyo)

MENTORING

Velocity Yu (Apr 2021-June 2022), UW Undergrad. Published [11][14][1]. Now at USC Ph.D.

Alex Mallen (Apr 2022-July 2023), UW Undergrad. Published [7]. Now at EleutherAI.

Daniel Kim (Sept 2022-July 2023), UW CSE Ph.D. student. Published [4].

Abhika Mishra (January 2023-Present). UW Undergrad. Published [27].

Go Kamoda (March 2023-Present), Tohoku University Undergrad.

SELECTED

INVITED

TALKS

University of Edinburgh, Microsoft Medical, UMass Amherst: *Self-reflective Language Models*, Oct/Nov 2023.**Preferred Networks, University of Tokyo, MLDS Unit seminar @Okinawa Institute of Science and Technology:** *Retrieval-augmented LMs and Applications*, Aug 2023**REML@SIGIR, The University of Queensland:** *Investigating and Building Efficient and Reliable LMs with Retrieval*, July 2023**MILA NLP Reading Group:** *Adaptive and trustworthy NLP with Retrieval*, April 2023**The AI TALK:** *Adaptive and trustworthy NLP with Retrieval*, March 2023**AI Quiz King:** *Towards Better Multilingual Information Access*, December, 2022**Amazon (Alexa):** *Towards Better Multilingual Information Access*, August, 2022**SEA: Search Engines Amsterdam:** *One Question Answering Model for Many Languages with Cross-lingual Passage Retrieval*, October 2021**Apple (Web Answers):** *One Question Answering Model for Many Languages with Cross-lingual Passage*

Retrieval, July 2021

Google Language & Apple (Web Answers): XOR QA: Cross-lingual Open-Retrieval Question Answering
Virtual, January, 2021

Google Research: *Learning to Retrieve Reasoning Paths over Wikipedia Graphs*, June, 2020

PRESS &
MEDIA

How Self-RAG Could Revolutionize Industrial LLMs (Towards Data Science) 2023
Lost in translation no more: IBM Fellowship winner Akari Asai asks — and answers — big questions in NLP to expand information access to all (Allen School News) 2022
Going Beyond SQuAD: Question Answering in Different Languages (Towards Data Science) 2020
Salesforce's AI navigates Wikipedia to find answers to complex questions (Venture Beat) 2020
Learning to retrieve reasoning paths from the Wikipedia graph (Salesforce Research Blog) 2020
Top Trends of Graph Machine Learning in 2020 (Towards Data Science) 2020
100,000 happy moments - What makes people happy? A huge database is making it possible to discern the answer at last. (MIT Technology Review) 2019