

# Matthew Finlayson

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EDUCATION	<b>Harvard University</b> A.B. Cum Laude in Field/Highest Honors in Computer Science and Linguistics (Joint), GPA 3.9/4.0.	Sep 2015–May 2021
RESEARCH	<b>Allen Institute for AI (AI2), Aristo</b> Pre-doctoral researcher advised by Peter Clark and Ashish Sabharwal.	Aug 2021–Present
	<b>Harvard University Computer Science</b> Undergraduate researcher advised by Stuart Shieber and Yonatan Belinkov.	Jan 2019–May 2021
PUBLICATIONS	<ul style="list-style-type: none"><li>[1] <a href="#">“Lila: A Unified Benchmark for Mathematical Reasoning”</a> <b>Matthew Finlayson</b>, Swaroop Mishra, Pan Lu, Leonard Tang, Sean Welleck, Chitta Baral, Tanmay Rajpurohit, Oyvind Tafjord, Ashish Sabharwal, Peter Clark, and Ashwin Kalyan. EMNLP 2022.</li><li>[2] <a href="#">“What Makes Instruction Learning Hard? An Investigation and a New Challenge in a Synthetic Environment”</a> <b>Matthew Finlayson</b>, Kyle Richardson, Ashish Sabharwal, and Peter Clark. EMNLP 2022 oral presentation.</li><li>[3] <a href="#">“Causal Analysis of Syntactic Agreement Mechanisms in Neural Language Models”</a> <b>Matthew Finlayson</b>, Aaron Mueller, Sebastian Gehrmann, Stuart Shieber, Tal Linzen, and Yonatan Belinkov. ACL 2021 oral presentation.</li><li>[4] <a href="#">“Decomposed Prompting: A Modular Approach for Solving Complex Tasks”</a> Tushar Khot, Harsh Trivedi, <b>Matthew Finlayson</b>, Yao Fu, Kyle Richardson, Peter Clark, and Ashish Sabharwal. ArXiv 2022.</li></ul>	
INVITED TALKS	<b>Seminar on Formal Languages and Neural Networks (FLaNN)</b> <i>What can formal languages tell us about instruction learning?</i>	Nov 2022
	<b>Allen Institute for AI (AI2)</b> <i>A Unified Benchmark for Mathematical Reasoning</i>	Sep 2022
TEACHING	<b>Harvard School of Engineering and Applied Sciences</b> <b>CS-51: Abstraction and Design in Computation</b> Head Teaching Fellow	Jan 2020–May 2021
	<b>CS-187: Computational Linguistics and NLP</b> Curriculum developer, Teaching Fellow	Sep 2019–Dec 2020
SERVICE	<b>MathNLP @ EMNLP</b> Program Committee	<b>EMNLP, NeurIPS, MATH-AI</b> 2022 Reviewing
EXPERIENCE	<b>Microsoft, Natural Language Experiences, SWE Intern</b> Improved and personalized text prediction in Microsoft Office.	Jun–Aug 2020
	<b>Hikma Health, SWE Intern</b> Developed a mobile electronic health record system for healthcare professionals working with refugees.	Jun–Aug 2019

OTHER

**Harvard First-Year Outdoor Program** Aug 2018–May 2021  
Mentored incoming first-year students on week-long backpacking trips.

**Harvard Sailing Club** Aug 2018–May 2021  
Vice President. Taught sailing basics to beginners weekly.

**Harvard Outing Club** Aug 2015–May 2021  
Led regular hiking trips to improve outdoor access for Harvard affiliates.

Computer languages: Python, OCaml, few-shot prompting ;)

Human languages: English, Tagalog, some Vietnamese, some Spanish

Hobbies: mechanical keyboards, configuring Vim, camping, sailing, sketching