Alexis J. Ross

alexisr@allenai.org https://alexisjihyeross.github.io/

EDUCATION

Harvard University, Cambridge, Massachusetts

Sept 2016 – May 2020

A.B. with Honors in Computer Science and Philosophy (Joint)

RESEARCH EXPERIENCE Allen Institute for Artificial Intelligence (AI2), AllenNLP

July 2020 – Present

Predoctoral Researcher

Mentors: Ana Marasović and Matthew E. Peters

Harvard University, Computer Science and Philosophy

Sept 2019 - May 2020

Mentors: Himabindu Lakkaraju and Bernhard Nickel

Senior Thesis: Explaining Blackbox Models with Linear Approximations

Awarded Thomas T. Hoopes Prize for "outstanding scholarly work" by undergraduates.

Microsoft Research

May 2019 - Aug 2019

Research Intern, Project Hanover

Mentor: Tristan Naumann

Project: Machine Reading for Precision Medicine

Harvard University, NLP Group

March 2019 - May 2019

Research Assistant

Mentors: Yonatan Belinkov and Alexander Rush

Project: Probing for Neurons that Encode and Exploit Negation in BERT

Johns Hopkins, Center for Language and Speech Processing

 $June\ 2018-Aug\ 2018$

Undergraduate Researcher, JSALT Workshop

Mentor: Ellie Pavlick

Project: General-Purpose Sentence Representation Learning

Harvard University, Cognitive Neuropsychology Laboratory

Feb 2017 - Aug 2017

Research Assistant

Mentors: Gilles Vannuscorps and Alfonso Caramazza

Project: Object Orientation Perception

PREPRINTS

[1] Tailor: Generating and Perturbing Text with Semantic Controls.

Alexis Ross*, Tongshuang Wu*, Hao Peng, Matthew Peters, Matt Gardner. In submission, 2021.

- [2] Competency Problems: On Finding and Removing Artifacts in Language Data.
 Matt Gardner*, William Merrill*, Jesse Dodge, Matthew E. Peters, **Alexis Ross**, Sameer Singh,
 Noah Smith. In submission, 2021.
- [3] Ensuring Actionable Recourse via Adversarial Training.

 Alexis Ross, Himabindu Lakkaraju, and Osbert Bastani. In submission, 2021.

PUBLICATIONS

- [4] Explaining NLP Models via Minimal Contrastive Editing (MiCE).

 Alexis Ross, Ana Marasović, and Matthew E. Peters. Findings of ACL 2021.
- [5] How well do NLI models capture verb veridicality?

 Alexis Ross and Ellie Pavlick. EMNLP 2019. Oral presentation.
- [6] Probing what different NLP tasks teach machines about function word comprehension. Najoung Kim, Roma Patel, Adam Poliak, Alex Wang, Patrick Xia, R Thomas McCoy, Ian Tenney, Alexis Ross, Tal Linzen, Benjamin Van Durme, Samuel R Bowman, and Ellie Pavlick. *SEM 2019. Best Paper Award.

TEACHING EXPERIENCE

CS 121: Introduction to the Theory of Computation

 $Sept\ 2018-Dec\ 2018$

Teaching Fellow, Harvard School of Engineering and Applied Sciences

Instructor: Boaz Barak

Awarded a Certificate of Distinction in Teaching for a student evaluation of 4.8/5.0.