Grusha Prasad

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EDUCATION

Johns Hopkins University, Ph.D. Cognitive Science   2017-Present
Advisor: Tal Linzen

Hampshire College, B.A. Cognitive Science   2013-2017
Advisor: Joanna Morris

Other certificates:
Johns Hopkins University, Teaching Academy Certificate   2021
Johns Hopkins University, Teaching Institute   2020
Five College Certificate for Cognitive Neuroscience   2017

EMPLOYMENT

Research Intern, Facebook AI Research   Fall 2020
Supervisor: Adina Williams

Lab manager, Psycholinguistics lab at Hampshire College   2014-2017
Supervisor: Joanna Morris

Research assistant, Linguistics department at UMass Amherst   2016-2017
Supervisor: Brian Dillon

Summer intern, Center for Language Science at Penn State University   Summer 2016
Supervisor: Giuli Dussias

PEER-REVIEWED JOURNAL PAPERS

Grusha Prasad & Tal Linzen. Rapid syntactic adaptation in self-paced reading: detectable, but only with many participants (2021). *Journal of Experimental Psychology: Learning, Memory and Cognition.*

PEER-REVIEWED PROCEEDINGS PAPERS

Shauli Ravfogel[*], **Grusha Prasad**[*], Tal Linzen & Yoav Goldberg (2021). Counterfactual Interventions Reveal the Causal Effect of Relative Clause Representations on Agreement Prediction *Proceedings of the 25th Conference on Computational Natural Language Learning (CoNLL)*. [arxiv]. [*]equal contribution.

Grusha Prasad, Yixin Nie, Mohit Bansal, Robin Jia, Douwe Kiela & Adina Williams (2021). To what extent do human explanations of model behavior align with actual model behavior? *Proceedings of the 4th Workshop on the Analysis and Interpretation of Neural Networks for Natural Language Processing (BlackBox NLP)* [arxiv].

Grusha Prasad, Marten van Schijndel & Tal Linzen (2019). Using priming to uncover the organization of syntactic representations in neural language models. *Proceedings of the 23rd Conference on Computational Natural Language Learning (CoNLL)*. [arxiv] **Honorable mention for Best Paper Award for Research Inspired by Human Language Learning and Processing**

PEER-REVIEWED CONFERENCE PRESENTATIONS

2020:
Grusha Prasad, & Tal Linzen. Rapid syntactic adaptation in SPR: detectable, but requires many participants. **Oral Presentation.** *33nd Annual CUNY Conference on Human Sentence Processing*, Virtual Conference, March 19. [slides]

2019:
Grusha Prasad and Tal Linzen. How much harder are hard garden-path sentences than easy ones? **Poster Presentation.** *41st Annual Conference of the Cognitive Science Society, Montreal, July 24-27* [poster] [OSF]

Grusha Prasad, Marten van Schijndel & Tal Linzen. Using syntactic priming to investigate how recurrent neural networks represent syntax **Poster Presentation.** *32nd Annual CUNY Conference on Human Sentence Processing*, Boulder, Colorado, March 15. [poster]

Grusha Prasad, & Tal Linzen. Reassessing the evidence for syntactic adaptation from self-paced reading studies. **Poster Presentation.** *32nd Annual CUNY Conference on Human Sentence Processing*, Boulder, Colorado, March 15. [poster]

2018:
Grusha Prasad, Joanna Morris & Mark Feinstein. The P600 for singular 'they': How the brain reacts when John decides to treat themselves to sushi. **Poster Presentation**, *31st Annual CUNY Conference on Human Sentence Processing*, Davis, California, March 15. [poster]

2017:
Grusha Prasad, Joanna Morris & Mark Feinstein. The P600 for singular 'they': How the brain reacts when John decides to treat themselves to sushi. **Oral Presentation**, *58th Annual Meeting of the Psychonomic Society*, Vancouver, British Columbia, November 9-12. [slides]

INVITED TALKS

The P600 for singular 'they': How the brain reacts when John decides to treat themselves to sushi.
University of Massachusetts, Amherst. October 15 2021.

How do neural networks encode and use syntactic information?
Complang, Massachusetts Institute of Technology (Virtual talk). April 7 2021.

Using priming to understand how humans and neural networks represent sentences
Cognitive and Behavioural Neuroscience Colloquium, George Mason University (Virtual talk). February 17 2021.

Fantastic garden path effects and how to find and model them
University of Potsdam, Germany (Virtual talk). March 13 2020.

NON PEER-REVIEWED MANUSCRIPTS

Grusha Prasad & Joanna Morris. The P600 for singular 'they': How the brain reacts when John decides to treat themselves to sushi. [PsyArXiv] [OSF]

TEACHING

Classes at Johns Hopkins University:

Instructor: Playing with Data: an Experimenter's Guide to Hypotheses Evidence and the Truth	2021
Teaching Assistant: Bayesian Inference	2020
Teaching Assistant: Introduction to computational cognitive science	2019
Teaching Assistant: Cognitive Neuropsychology of Visual Perception	2019
Teaching Assistant: Cognitive Development	2018
Teaching Assistant: Mind, Brain and Experience.	2018

Classes at Hampshire College:

Co-instructor: What does a theory of meaning look like?	2016
Teaching Assistant: Electrophysiology Methods and Data Analysis	2016
Teaching Assistant: Words, Faces and Other Minds	2015
Teaching Assistant: Brain and Cognition II: Electrophysiological methodologies	2015

Guest lectures:

Language Acquisition (*Polly High School class: AP Psychology*)	2020
Syntactic Priming (*JHU Class: Computational Psycholinguistics*)	2020
Syntactic Priming (*JHU Class: Computational Psycholinguistics*)	2019
Language Acquisition (*JHU Class: Cognitive Development*)	2019

Other:

Workshops on Cognitive neuroscience and Experimental Design	2015

Co-designed and ran multiple session workshop for 8th graders at Hilltown Charter School (East Hampton, MA) and Oakridge International School (Bengaluru, India)

MENTORING

Undergraduate RAs
Hunter Paulison, Daniela Torres, Meg Obata, Claire Joyce, Brody Silva, Nicholas Douglass

Women in Science and Engineering (WISE) Program 2018
Co-mentored a high school student on an eye-tracking project

AWARDS AND HONORS

Johns Hopkins University, Owen's Scholar Award   2017-2020
Fellowship for outstanding incoming PhD students in the natural sciences

Hampshire College, Ingenuity Award   2017
An award to recognize students who work in creative and effective ways to improve the Hampshire community

Hampshire College, Ray and Lorna Coppinger Endowment Grants   2016
Research grant for projects in cognitive or biological sciences

Hampshire College, Cognitive Science   2016
Research grant for projects in cognitive science

Hampshire College program in Culture, Brain and Development   2016, 2015
Research grant for projects incorporating psychobiological and sociocultural perspectives

Hampshire College program in Culture, Brain and Development   2016, 2015
Summer placement grant for projects incorporating psychobiological and sociocultural perspectives

Hampshire College, Ethics and Common Good grant   2015
Grant to support student projects that address a common good issue/ community need

Hampshire College, Earl Ubell Science Information Award   2015
Grant to support student projects that seek to make the scientific method or scientific findings accessible to non-scientists

Hampshire College, Bell Ringer Merit Scholarship   2015
Most prestigious merit scholarship awarded to incoming students

SKILLS

Programming languages
Python, PyTorch, R, MATLAB, Java, Clojure

Natural languages
Proficient in English, Telugu, Kannada. Conversational Hindi. Basic French.

Stimulus presentation software
IbexFarm, PCIbex, PsychoPy, OpenSesame, E-prime

SERVICE

Journal Reviewing:

Glossa Psycholinguistics	2021
Transactions of the Association for Computational Linguistics (co-reviewer)	2021
Cortex	2021
Language	2020
Cortex	2020
Language Cognition and Neuroscience (co-reviewer)	2019

Conference Reviewing:

The SIGNLL Conference on Computational Natural Language Learning	2021
European Chapter of the Association for Computational Linguistics	2020

Johns Hopkins University:

Departmental Representative for the Graduate Representative Organization	2017-2021

Hampshire College:

Student Representative to the School of Cognitive Science	2016-2017
Culture, Brain and Development Student Group Leader	2015-2017

PROFESSIONAL MEMBERSHIPS

American Psychological Association	2021
Association for Computational Linguistics	2019
Psychonomic Society	2017,2018