# Forrest Davis

Curriculum Vitae

## Employment

- 2023- **Assistant Professor**, Department of Computer Science, Colgate University, Hamilton, NY
- 2022-2023 **Postdoctoral Associate**, Department of Linguistics and Philosophy, Massachusetts Institute of Technology, Cambridge, MA.

#### Education

2022 **PhD**, Department of Linguistics, Cornell University, Ithaca, NY.

Advisor: Marten van Schijndel

Committee Members: Dorit Abusch, Miloje Despić, John Whitman

Dissertation - On the Limitations of Data: Mismatches between Neural Models of Language and

Humans

- 2020 MA, Linguistics, Cornell University, Ithaca, NY.
- 2017 BA, Computer Science and Mathematics, Columbia University, New York, NY.

#### Awards

- 2022 Sage Fellowship, Cornell University
- 2021 ACL 2021 Outstanding Reviewer
- 2020 President's Travel Fund for the Humanities, Cornell University
- 2019 Graduate School Conference Travel Grant, Cornell University
- 2019, 2018 Linguistics Department Conference Travel Grant, Cornell University
  - 2018 Sage Fellowship, Cornell University
- 2017, 2016 Work Exemption Program Grant, Columbia University

#### Publications

#### Journal Articles

2021 Finding Event Structure in Time: What Recurrent Neural Networks can tell us about Event Structure in Mind

Forrest Davis and Gerry T.M. Altmann

In Cognition, 213. 2021.

#### Peer-Reviewed Proceedings

2023 Can Language Models Be Tricked by Language Illusions? Easier with Syntax, Harder with Semantics

Yuhan Zhang, Edward Gibson and Forrest Davis

Proceedings of the 2023 Conference on Computational Natural Language Learning (CoNLL 2023)

2022 Incremental Processing of Principle B: Mismatches Between Neural Models and Humans Forrest Davis

Proceedings of the 2022 Conference on Computational Natural Language Learning (CoNLL 2022; 26%)

2021 Uncovering Constraint-Based Behavior in Neural Models via Targeted Fine-Tuning Forrest Davis and Marten van Schijndel

Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics (ACL 2021; 21.3%)

2020 Discourse structure interacts with reference but not syntax in neural language models Forrest Davis and Marten van Schijndel

Proceedings of the 2020 Conference on Computational Natural Language Learning (CoNLL; 23.3%)

2020 Interaction with Context During Recurrent Neural Network Sentence Processing Forrest Davis and Marten van Schijndel

Proceedings of the 42nd Annual Meeting of the Cognitive Science Society (CogSci 2020)

2020 Recurrent Neural Network Language Models Always Learn English-Like Relative Clause Attachment

Forrest Davis and Marten van Schijndel

Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL 2020; 22.7%)

2017 Linguistically Rich Vector Representations of Supertags for TAG Parsing Dan Friedman, Jungo Kasai, R Thomas McCoy, Robert Frank, Forrest Davis, Owen Rambow Proceedings of the 13th International Workshop on Tree Adjoining Grammars and Related Formalisms

# Presentations (reviewed by abstract)

2024 What Language Models Can Tell Us About Learning Adjectives

Megan Gotowski and Forrest Davis

2024 Linguistic Society of America (LSA) Annual Meeting, New York, New York

2020 Recurrent neural networks use discourse context in human-like garden path alleviation Forrest Davis and Marten van Schijndel

33rd Annual CUNY Conference on Human Sentence Processing (CUNY 2020), Amherst, Massachusetts

2020 Categorical and gradient dimensions of stress in English compounds

Forrest Davis and Abigail C. Cohn

2020 Workshop of the Berkeley Linguistics Society (BLSW 2020), Berkeley, California

2020 The relationship between lexical frequency, compositionality, and phonological reduction in English compounds

Forrest Davis and Abigail C. Cohn

94th Annual Meeting of the Linguistic Society of America (LSA 2020), New Orleans, Lousianna

2019 Effects of lexical frequency and compositionality on phonological reduction in English compounds

#### Forrest Davis and Abigail C. Cohn

The 25th Architectures and Mechanisms of Language Processing Conference (AMLaP 2019), Moscow, Russia

2019 The pragmatics of single wh-in situ questions in English

#### **Forrest Davis**

93rd Annual Meeting of the Linguistic Society of America (LSA 2019), New York, NY

#### Invited Talks

- 2023 Neural Language Models are not Modeling Human Linguistic Behavior FALCoN Lab, University of Georgia
- 2023 Principle B, Processing, and Neural Models of Language UMass Amherst
- 2023 Principle B, Processing, and Neural Models of Language Language and Cognition Group, Harvard University
- 2022 What do Neural Models of Language Actually Model? University of Sheffield
- 2021 Investigating Competing Training Signals in Language Stanford University
- 2019 Recurrent Neural Network Syntactic Representations in Linguistic Contexts University of Connecticut
- 2019 Language as a science Peddie School

# Teaching

| Spring 2024 | COSC 101 - Introduction to Computing I                                   | Colgate            |
|-------------|--|--------------------|
| Spring 2024 | COSC 410 - Applied Machine Learning                                      | Colgate            |
| Fall 2023   | COSC 101 - Introduction to Computing I                                   | Colgate            |
| Fall 2023   | COSC 480 - Topics in Computer Science: Natural Language Processing       | Colgate            |
| Spring 2023 | Special Seminar: Topics in Computational Linguistics                     | MIT                |
| Fall 2022   | Special Seminar: Methods in Computational Linguistics                    | MIT                |
| Spring 2022 | Superlinguistics: Comics, Signs and Other Sequential Images              | Cornell University |
| Spring 2021 | Introduction to Cognitive Science  | Cornell University |
| Spring 2021 | Pragmatics   | Cornell University |
| Fall 2020   | Language and Law   | Cornell University |
| Spring 2020 | Computational Linguistics  | Cornell University |
| Fall 2019   | Guest Lecture, Phonology I: Prosodic representation of English compounds | Cornell University |
| Fall 2019   | Introduction to Syntax and Semantics                                     | Cornell University |
| Spring 2019 | Pragmatics   | Cornell University |
| Spring 2019 | Computational Linguistics  | Cornell University |
| Fall 2018   | Introduction to Linguistics  | Cornell University |

Service

2023- Department Tea Coordinator (with Prof. Grusha Prasad), Colgate University

2023- Academic Liaison for Women and Men's Swimming and Diving, Colgate University

2019 Senior Editor of Semantics and Linguistic Theory (SALT 29)

2018–2019 Graduate Student Representative on New Faculty Hiring Committee

2018 Junior Editor of Semantics and Linguistic Theory (SALT 28)

2018 Annual Meeting for the North East Linguistics Society (NELS 49) Committee Member

2017–2019 Cornell Linguistics Circle web admin

### Reviewing

Conferences ACL 2019, 2020, 2021, 2022, 2023 CoNLL 2019, 2020, 2021, 2022, 2023 EMNLP 2021, 2022, 2023 HSP 2023 Penn Linguistics Conference 2023, LSA 2023

Journals Cognition, Glossa Psycholinguistics

#### Technical Skills

Programming Python, C, C++, Matlab, R, Java, AWK, HTML Languages

 $\begin{array}{ll} \text{Human} & \text{English, French (Intermediate), Hindi/Urdu (Intermediate)} \\ \text{Languages} & \end{array}$ 

## Updated

Last Updated November 19, 2023