

Forrest Davis

Curriculum Vitae

322 Bernstein
Colgate University
Hamilton, NY 13346
✉ fdavis@colgate.edu
📄 forrestdavis.github.io
<https://github.com/forrestdavis>

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

- 2025 Mind, Brain, and Behavior Initiative Discretionary Grant, Colgate University
- 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

- 2025 The Gap Between Humans and Language Models: Analyzing Adjective Performance
Megan Gotowski and **Forrest Davis**
Under Review *Language Acquisition*
- 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

- 2025 Discourse Sensitivity in Attraction Effects: The Interplay Between Language Model Size and Training Data
Sanghee J. Jim and **Forrest Davis** (equal contribution)
To appear in the Proceedings of the Society for Computation in Linguistics 2025
- 2024 Training an NLP Scholar at a Small Liberal Arts College: A Backwards Designed Course Proposal
Grusha Prasad and **Forrest Davis** (equal contribution)
Proceedings of the Sixth Workshop on Teaching NLP (collocated with ACL 2024)
- 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

Conference Proceedings

- 2024 What Language Models Can Tell Us About Learning Adjectives
Megan Gotowski and **Forrest Davis** (equal contribution)
Proceedings of the Linguistic Society of America, Vol. 9, No. 1.

Presentations (reviewed by abstract)

- 2025 Being (an LM) and Nothingness: How Models Interpret Expletive Forms
Forrest Davis and Megan Gotowski (equal contribution)
Under Review for 50 Boston University Conference on Language Development, Boston, Massachusetts
- 2025 Humans vs. Machines: Comparing Adjective Learning Performance
Megan Gotowski and **Forrest Davis** (equal contribution)
2025 Linguistic Society of America Annual Meeting, Philadelphia, Pennsylvania
- 2024 Rage Against the Machine: Comparing Human and Model Performance with Adjective Learning
Megan Gotowski and **Forrest Davis** (equal contribution)
49 Boston University Conference on Language Development, Boston, Massachusetts
- 2024 What Language Models Can Tell Us About Learning Adjectives
Megan Gotowski and **Forrest Davis** (equal contribution)
Talk at 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, Louisiana
- 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

- 2024 Neural Language Models are not Models of Human Linguistic Knowledge
CSoL, University of Toronto
- 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

Fall 2025	CORE S119 - Language as Human Nature	Colgate
Fall 2025	COSC 410 - Applied Machine Learning	Colgate
Spring 2025	COSC 482 - Independent Research: Music Recommendation	Colgate
Spring 2025	COSC 482 - Independent Research: Mass Personalization	Colgate
Spring 2025	COSC 492 - Independent Research: Using Machine Learning Models to Delineate Tree Crowns in Aerial Imagery of Forests in Siberia	Colgate
Spring 2025	COSC 410 - Applied Machine Learning	Colgate
Fall 2024	COSC 482 - Independent Research: Spanish Dialect Identification	Colgate
Fall 2024	COSC 482 - Independent Research: Modeling Agreement Errors	Colgate
Fall 2024	COSC 426 - Natural Language Processing	Colgate
Fall 2024	COSC 101 - Introduction to Computing I	Colgate
Spring 2024	COSC 482 - Independent Research: Semantic Composition in Chinese LLMs	Colgate
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

Mentoring

Undergraduate Research at Colgate University

Fall 2025 Renzo Cruzado '26, Jacob Denekamp '26, Chenyun Liu '27
Spring 2025 Erika Heng '25, Saran Duncan '25, Sophia Goffe '25 (Honors Thesis)
Fall 2024 Jaanhvi Agarwal '25, Kayla Mistica '25
Spring 2024 Shafi Islam '24

Service

2025-2028 Council for Faculty Development committee member
2024-2025 Mind, Brain and Behavior Initiative committee member
2024 NAACL 2024 Student Research Workshop Mentor
2023-2025 CS Bytes Coordinator, 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

Area **CogSci** 2024, 2025
Chair/Meta-reviewer
Conferences **ACL** 2019, 2020, 2021, 2022, 2023 **CoNLL** 2019, 2020, 2021, 2022, 2023, 2024, 2025
EMNLP 2021, 2022, 2023 **HSP** 2023 **Penn Linguistics Conference** 2023, 2024, 2025
LSA 2023, **COLM** 2024, 2025 **NAACL SRW** 2024
Journals Cognition, Glossa Psycholinguistics, Computational Linguistics, Transactions of the Association for Computational Linguistics

Technical Skills

Programming Languages PYTHON, C, C++, MATLAB, R, JAVA, AWK, HTML
Human Languages ENGLISH, FRENCH (INTERMEDIATE), HINDI/URDU (INTERMEDIATE)

Updated

Last Updated August 26, 2025