

Forrest Davis

Department of Computer Science
322 Bernstein Hall
Colgate University
13 Oak Drive Hamilton
Hamilton, NY 13346

Email: fdavis@colgate.edu
Website: forrestdavis.github.io
Github: github.com/forrestdavis/

EMPLOYMENT

Assistant Professor of Computer Science <i>Colgate University</i>	2023-Present
Postdoctoral Associate <i>Department of Linguistics and Philosophy, Massachusetts Institute of Technology</i>	2022-2023

EDUCATION

Cornell University, Ph.D. Linguistics <i>Advisor: Marten van Schijndel</i>	2022
Cornell University, M.A. Linguistics	2020
Columbia University, A.B. Computer Science and Mathematics	2017

PUBLISHED WORK

* indicates equal contribution. † indicates project lead.

Peer-reviewed journal articles

[J1] Megan Gotowski* & **Forrest Davis***. (*In Press*). The Gap Between Humans and Language Models: Analyzing Adjective Performance. *Language Acquisition*.

[J2] **Forrest Davis** & Gerry T.M. Altmann (2021). Finding Event Structure in Time: What Recurrent Neural Networks can tell us about Event Structure in Mind. *Cognition*, 213. 15 pages.

Peer-reviewed conference proceedings papers

[CP1] Sanghee J. Kim* & **Forrest Davis*** (2025). Discourse Sensitivity in Attraction Effects: The Interplay Between Language Model Size and Training Data. In *Proceedings of the Society for Computation in Linguistics*, 13 pages. (SCiL 2025) **Oral Presentation.**

[CP2] Grusha Prasad* & **Forrest Davis*** (2024). Training an NLP Scholar at a Small Liberal Arts College: A Backwards Designed Course Proposal. In *Proceedings of the Sixth Workshop on Teaching NLP*, pages 105–118, Bangkok, Thailand. Association for Computational Linguistics. **Oral Presentation.**

[CP3] Yuhan Zhang, Edward Gibson, & **Forrest Davis[†]** (2023). Can Language Models Be Tricked by Language Illusions? Easier with Syntax, Harder with Semantics. In *Proceedings of the 2023 Conference on Computational Natural Language Learning*, pages 1–14, Singapore. Association for Computational Linguistics (CoNLL 2023). **Oral Presentation.**

[CP4] **Forrest Davis** (2022). Incremental Processing of Principle B: Mismatches Between Neural Models and Humans. In *Proceedings of the 2022 Conference on Computational Natural Language Learning*, pages 144–156, Abu Dhabi, United Arab Emirates (Hybrid). Association for Computational Linguistics (CoNLL 2022; 26% accept). **Oral Presentation.**

[CP5] **Forrest Davis** & Marten van Schijndel (2021). Uncovering Constraint-Based Behavior in Neural Models via Targeted Fine-Tuning. In *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing*, pages 1159–1171, Online. Association for Computational Linguistics. (ACL 2021; 21.3% accept). **Poster Presentation.**

[CP6] **Forrest Davis** & Marten van Schijndel (2020). Discourse structure interacts with reference but not syntax in neural language models In *Proceedings of the 2020 Conference on Computational Natural Language Learning*, pages 396–407, Online. Association for Computational Linguistics. (CoNLL 2020; 23.3% accept). **Poster Presentation.**

[CP7] **Forrest Davis** & Marten van Schijndel (2020). Interaction with Context During Recurrent Neural Network Sentence Processing. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*, pages 2744–2750, (CogSci 2020). **Poster Presentation.**

[CP8] **Forrest Davis** & Marten van Schijndel (2020). Recurrent Neural Network Language Models Always Learn English-Like Relative Clause Attachment. In *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, pages 1979–1990, Online. Association for Computational Linguistics. (ACL 2020; 22.7% accept). **Poster Presentation.**

[CP9] Dan Friedman, Jungo Kasai, R Thomas McCoy, Robert Frank, **Forrest Davis**, & Owen Rambow (2017). Linguistically Rich Vector Representations of Supertags for TAG Parsing. In *Proceedings of the 13th International Workshop on Tree Adjoining Grammars and Related Formalisms*, pages 122–131, Umeå, Sweden. Association for Computational Linguistics. **Oral Presentation.**

Peer-reviewed conference abstracts

[CA1] Megan Gotowski* & **Forrest Davis*** (2026). What is It? Language Models and Expletive Forms. To appear at *2026 Linguistic Society of America Annual Meeting (LSA 2026)*, New Orleans, Louisiana. **Oral Presentation.**

[CA2] **Forrest Davis*** & Megan Gotowski* (2025). Being (an LM) and Nothingness: How Models Interpret Expletive Forms. To appear at *Boston University Conference on Language Development (BUCLD 50)*, Boston, Massachusetts. **Poster Presentation.**

[CA3] Megan Gotowski* & **Forrest Davis*** (2025). Humans vs. Machines: Comparing Adjective Learning Performance. *2025 Linguistic Society of America Annual Meeting (LSA 2025)*, Philadelphia, Pennsylvania. **Poster Presentation.**

[CA4] Megan Gotowski* & **Forrest Davis*** (2024). Rage Against the Machine: Comparing Human and Model Performance with Adjective Learning. *49 Boston University Conference on Language Development (BUCLD 49)*, Boston, Massachusetts. **Poster Presentation.**

[CA5] Megan Gotowski* & **Forrest Davis*** (2024). What Language Models Can Tell Us About Learning Adjectives. *2024 Linguistic Society of America Annual Meeting (LSA 2024)*, New York, New York. **Oral Presentation.**

[CA6] **Forrest Davis** and Marten van Schijndel (2020). Recurrent neural networks use discourse context in human-like garden path alleviation. *33rd Annual CUNY Conference on Human Sentence Processing (CUNY 2020)*, Amherst, Massachusetts. **Poster Presentation.**

[CA7] **Forrest Davis** and Abigail C. Cohn (2020). Categorical and gradient dimensions of stress in English compounds. *2020 Workshop of the Berkeley Linguistics Society (BLSW 2020)*, Berkeley, California. **Poster Presentation.**

[CA8] **Forrest Davis** and Abigail C. Cohn (2020). The relationship between lexical frequency, compositionality, and phonological reduction in English compounds. *94th Annual Meeting of the Linguistic Society of America (LSA 2020)*, New Orleans, Louisiana. **Poster Presentation.**

[CA9] **Forrest Davis** and Abigail C. Cohn (2019). Effects of lexical frequency and compositionality on phonological reduction in English compounds. *The 25th Architectures and Mechanisms of Language Processing Conference (AMLaP 2019)*, Moscow, Russia. **Poster Presentation.**

[CA10] **Forrest Davis** (2019). The pragmatics of single wh-in situ questions in English. *93rd Annual Meeting of the Linguistic Society of America (LSA 2019)*, New York, New York. **Poster Presentation.**

Abstract-reviewed conference proceedings papers

[AP1] Megan Gotowski* & **Forrest Davis*** (2024). What Language Models Can Tell Us About Learning Adjectives. In *Proceedings of the Linguistic Society of America 9 (1)*, 15 pages (LSA 2024). **Oral Presentation.**

TALKS

Invited talks

Neural Language Models are not Models of Human Linguistic Knowledge. <i>CSoL, Department of Linguistics, University of Toronto</i>	April 5 2024
Neural Language Models are not Modeling Human Linguistic Behavior. <i>FALCoN Lab, Department of Linguistics, University of Georgia</i>	Nov 15 2023
Principle B, Processing, and Neural Models of Language. <i>Department of Linguistics, University of Massachusetts Amherst</i>	April 26 2023
Principle B, Processing, and Neural Models of Language. <i>Language and Cognition Group, Harvard University</i>	Feb 28 2023
What do Neural Models of Language Actually Model? <i>University of Sheffield</i>	Nov 25 2022
Investigating Competing Training Signals in Language. <i>The Stanford Natural Language Processing Group, Stanford University</i>	Mar 11 2021
Recurrent Neural Network Syntactic Representations in Linguistic Contexts. <i>Department of Psychology, University of Connecticut</i>	Oct 17 2019
Language as a science. <i>Peddie School</i>	2019

GRANTS AND FELLOWSHIPS

Colgate grants and fellowships

Mind, Brain, and Behavior Initiative Discretionary Grant <i>Funding to purchase a corpus for research.</i>	2025
Faculty Development Council Discretionary Grant <i>Funding to present a paper at the TeachNLP workshop.</i>	2024
Student Wage Grant <i>Funding to hire student RAs for up to 150 hours per semester.</i>	2024, 2025

Grants and fellowships prior to Colgate

Sage Fellowship, Cornell University	2018, 2022
-------------------------------------	------------

AWARDS, HONORS, PRIZES

Outstanding Area Chair at Association for Computational Linguistics.	2021
--	------

SERVICE

Conference Meta Reviewing

Area Chair/Meta-reviewer: Annual Meeting of the Cognitive Science Society 2024, 2025, 2026

Journal Reviewing

Transactions of the Association for Computational Linguistics	2025
Computational Linguistics	2024
Glossa Psycholinguistics	2022
Cognition	2020

Conference Reviewing

The SIGNLL Conference on Computational Natural Language Learning	2019-Present
Penn Linguistics Conference	2023-Present
Conference on Language Modeling	2024-Present
NAACL: Student Research Workshop Mentor	2024
Conference on Empirical Methods in Natural Language Processing	2021, 2022, 2023
Association for Computational Linguistics.	2019-2023
Annual Conference on Human Sentence Processing	2023
Annual Meeting of the Linguistics Society of America	2023

Other external service

LifeLong Learning Talk – Artificial Intelligence: Its Uses and Limitations	Nov 5, 12 2025
Pop-Up Mentor at the 2024 Annual Meeting of the LSA	2024
Senior Editor of Semantics and Linguistic Theory (SALT 29)	2019
Junior Editor of Semantics and Linguistic Theory (SALT 28)	2018
Annual Meeting for the North East Linguistics Society Committee Member	2018

Colgate

Council for Faculty Development committee member	2025-2028
Academic Liaison for Women and Men's Swimming and Diving	2023-
Member of the Mind, Brain, and Behavior Initiative	2024-2025
Co-organizer of the CS Department Tea/CS Bytes	2023-2025
Member of CS Tenure Stream Search Committee	2025

TEACHING

Classes at Colgate University

The teaching load at Colgate is 5 credits per academic year. In the Computer Science Department this amounts to four courses per academic year and three labs.

COSC 492: Honors Research	2025S
COSC 482: Independent Research	2025F, 2025S, 2024F, 2024S
COSC 426: Natural Language Processing	2024F, 2023F
COSC 426L: Natural Language Processing Lab	2024F, 2023F

COSC 410: Applied Machine Learning	2025F,2025S,2024S
COSC 410L: Applied Machine Learning Lab	2025F,2025S,2024S
CORE S119: Language as Human Nature	2025F
COSC 101: Introduction to Computing I	2024F,2024S,2023F

Classes at the Massachusetts Institute of Technology

The teaching load for postdoctoral associates was 1 one course a semester.

Special Seminar: Topics in Computational Linguistics	2023S
Special Seminar: Methods in Computational Linguistics	2022F

Classes at Cornell University

In the Cornell University Linguistics Department, graduate students were required to be a teaching assistant for 6 semesters.

Superlinguistics: Comics, Signs and Other Sequential Images	2022S
Introduction to Cognitive Science	2021S
Pragmatics	2021S
Language and Law	2020F
Computational Linguistics	2020S
Introduction to Syntax and Semantics	2019F
Pragmatics	2019S
Computational Linguistics	2019S
Introduction to Linguistics	2018F

MENTORING

Undergraduate Research at Colgate University

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