

Will Decker

Curriculum Vitae

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| github.com/w-decker

Education

- 2024 – *Georgia Institute of Technology*
Ph.D., Psychology
Advisor: Prof. Anna (Any) Ivanova
- 2020 – 2024 *Louisiana State University*
B.S., Psychology; Minor, German
Advisors: Prof. Christopher Cox and Prof. Julie M. Schneider

Research Interests

- General: Language, learning, neuroimaging, artificial neural networks, LLMs
- Specific: Neural code of language and meaning
Implications of language on broader cognition
Computational formalizations of language and meaning
Developmental approaches to cognitive and computational neuroscience

Publications

- In prep **Decker, W.**, Schneider, J. M. (in prep registered report). When Reducing Noise in Developmental EEG Data, Is EEG Best Left Alone? *Developmental Cognitive Neuroscience*.
- Under review Fan, T., **Decker, W.**, Schneider, J. M. (under review). The domain-general neural basis of auditory statistical learning in children. *Neurobiology of Language*.

Conference Presentations

*equal contribution

- 2024 **Decker, W.**, Schneider, J.M., Cox, C. (April 2024). Neural processes of statistical learning. *Poster* presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA.
- Fan, T., **Decker, W.**, Momsen, J., Haebig, E., Schneider, J.M. (March 2024). The facilitatory role of rhyme during implicit and explicit word learning. *Poster* presented at the inaugural meeting of the Baton Rouge chapter for the Society for Neuroscience. Baton Rouge, Louisiana, USA.
- 2023 **Decker, W.**, Schneider, J. M., Cox, C. (October 2023). The architecture of auditory statistical learning in the brain: a dynamical functional connectivity study. *Poster* presented at the Society for the Neurobiology of Language's annual meeting. Marseille, France.
- Decker, W.**, Schneider, J. M. (September 2023). Is EEG really better left alone for developmental datasets. *Poster* presented at the annual meeting of the Society for Psychophysiological Research (SPR). New Orleans, Louisiana, USA.

Decker, W., Schneider, J. M. (July 2023). Neural signal processing for developmental data. *Lightning talk* presented at the annual LSU Summer Undergraduate Research Forum (SURF). Baton Rouge, Louisiana, USA.

Decker, W., Schneider, J. M. (July 2023). Is EEG really better left alone for developmental datasets. *Poster* presented at the annual LSU Summer Undergraduate Research Forum (SURF). Baton Rouge, Louisiana, USA.

Carter, M.*, **Decker, W.***, Ferdaus, R.*, George, K.*, McDonald, J., Rivers, A.*, Shoulders, B.* (April 2023). Effects of note-taking methods on learning. *Poster* presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA.

Forest, M., Lopez, S., **Decker, W.**, Schneider, J. M. (April 2023). The role of vocabulary knowledge in linguistic encoding of motion events: an ERP study. *Poster* presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA.

Riley, W., **Decker, W.**, Haebig, E., Schneider, J. M. (April 2023). Learning novelties: the effects of rhyme, vocabulary, and processing speed on novel word learning in adults. *Poster* presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA.

Decker, W., Fan, T., Haebig, E., Schneider, J. M. (March 2023). Neural mechanisms of novel word learning through rhyme in adults. *Poster* presented at the Cognitive Neuroscience Society's Annual Meeting. San Francisco, California, USA.

Lopez, S.L., Forest, M. L., **Decker, W.**, Schneider, J. M. (March 2023). The influence of native language on motion event encoding: an ERP study. *Poster* presented at the Cognitive Neuroscience Society's Annual Meeting. San Francisco, California, USA.

Fan, T., **Decker, W.**, Schneider, J. M. (March 2023). Domain-specific neural profiles of statistical learning of speech and tone in young children. *Poster* presented at the Cognitive Neuroscience Society's Annual Meeting. San Francisco, California, USA.

2022 **Decker, W.**, Haebig, E., Schneider, J. M. (November 2022). Anxiety and Word Learning in College Students. *Poster* presented at the annual University of Louisiana at Lafayette Undergraduate Research Conference. Lafayette, Louisiana, USA.
DOI:<https://osf.io/GNM8J>

Forest, M., Lopez, S., **Decker, W.**, Schneider, J. M. (November 2022). The influence of grammar on perception of repeated motion events. *Poster* presented at the annual University of Louisiana at Lafayette Undergraduate Research Conference. Lafayette, Louisiana, USA.

Wyble, A., **Decker, W.**, Haebig, E., Schneider, J.M. (November 2022). Rhyme and reason: the effects of rhyme on retrieval from semantic memory. *Poster* presented at the annual University of Louisiana at Lafayette Undergraduate Research Conference. Lafayette, Louisiana, USA.

Decker, W., Schneider, J.M. (April 2022). Choosing an EEG system: evaluating the pros and cons and quality of data among two different capping approaches. *Poster* presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA. DOI:<https://osf.io/6W4JF>

Invited Talks

- 2023 *Student Linguistics Meet-Up*
Louisiana State University
Topic: Using neuroimaging to examine statistical learning.
- Joint meeting of the Department of Psychology and Department of Communication Sciences and Disorders*
Louisiana State University
Topic: A pipeline for developmental EEG data

Awards, Honors and Fellowships

- 2024 *Distinguished Undergraduate Researcher Medalist*
Louisiana State University
- 2024 *Paul C. Young Award for Outstanding Undergraduate in Psychology*
Louisiana State University
- 2024 – 2028 *President's Fellowship*
Georgia Institute of Technology
Amount: \$22,000
- 2023 *LSU ASPIRE Travel Award*
Louisiana State University
Amount: \$500
- 2023 *Tiger Athletic Foundation (TAF) Undergraduate Honors Thesis Scholarship*
Louisiana State University
Amount: \$1,000
- 2023 *LSU Discover Travel Award*
Louisiana State University
Amount: \$1,500
- 2022 *Distinguished Undergraduate Researcher Candidate*
Louisiana State University

Funding

- 2023 *LSU Discover Undergraduate Summer Research Grant*
LSU Discover Undergraduate Research Program, Louisiana State University
Project title: A Universal Preprocessing-Pipeline for Event-Related Potentials (ERPs) in Developmental Electroencephalography (EEG) Research.
Amount: \$3,000

Memberships

- 2023 – 2024 *Society for Psychophysiological Research*
Student Member
- 2023 – 2024 *Society for the Neurobiology of Language*
Student Member

2022 – 2023 *Cognitive Neuroscience Society*
Undergraduate Student Member

Skills and Other

Languages	English (native), German (C1)
Programming	Python, R, MATLAB, Bash, Golang
Other	LaTeX, git
Certifications	CITI Responsible Conduct of Research