

Will Decker

Curriculum Vitae

March 2024

Contact

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Education

- 2024 – 2029 *Georgia Institute of Technology*
Ph.D., Psychology
Advisor: Prof. Anna (Anya) Ivanova
- 2024 – 2026 *Georgia Institute of Technology*
M.S., Psychology
Advisor: Prof. Anna (Anya) Ivanova
- 2020 – 2024 *Louisiana State University*
B.S., Psychology; Minor, German
Advisors: Prof. Christopher Cox and Prof. Julie M. Schneider

Research Interests

- General: Learning, language, perception, prediction, neuroimaging, neural networks
- Specific: Hippocampal contributions to learning and semantics
Computational models of language, learning and semantics
Implications of language on broader cognition
Developmental approaches to cognitive and computational neuroscience

Publications

- In prep **Decker, W.** Schneider, J.M., Cox, C. (in prep manuscript). The spatiotemporal architecture of auditory statistical learning.
- 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*.

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.

Decker, W. (April 2023). Using neuroimaging to examine statistical learning. Invited internal talk. Louisiana State University, 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. (April 2023). A pipeline for developmental EEG data: an introduction. Invited internal talk. Louisiana State University. 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>

Awards and Honors

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| 2024 – 2028 | President’s Fellowship, Georgia Institute of Technology |
| 2023 | Tiger Athletic Foundation (TAF) Undergraduate Honors Thesis Scholarship, Louisiana State University |
| 2023 | LSU Discover Travel Award, Louisiana State University |
| 2022 | Distinguished Undergraduate Research Candidate, Louisiana State University |

Funding

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| 2023 | <i>LSU Discover Undergraduate Summer Research Grant</i>
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 |
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Memberships

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| 2023 – | <i>Society for Psychophysiological Research</i>
Student Member |
| 2023 – | <i>Society for the Neurobiology of Language</i>
Student Member |
| 2022 – | <i>Cognitive Neuroscience Society</i>
Undergraduate Student Member |

Skills and Other

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