

# Will Decker

## Curriculum Vitae

May 2024

### Contact

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### Education

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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

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General: Learning, language, perception, neuroimaging, artificial neural networks

Specific: Hippocampal contributions to learning, language and semantics  
Computational models of learning, language and semantics  
Implications of language on broader cognition  
Developmental approaches to cognitive and computational neuroscience

### Publications

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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*.

### Conference Presentations

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\*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

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

## Awards, Honors and Fellowships

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- 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

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- 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

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2023 – *Society for Psychophysiological Research*  
Student Member

2023 – *Society for the Neurobiology of Language*  
Student Member

2022 – 2023 *Cognitive Neuroscience Society*  
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