## Will Decker

### Curriculum Vitae

June 2024

deckerwill7@gmail.com w-decker.github.io github.com/w-decker

#### Education

2024 – Georgia Institute of Technology

Ph.D., 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: 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

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.

Baton Rouge, Louisiana, USA.

Fan, T., **Decker, W.**, Momsen, J., Haebig, E., Schneider, J.M. (March 2024). The faciliatory 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.
- 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

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

2024	Distinguished	I Indorovaduato I	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 I	Psych	opl.	rysiol	'ogical	Research

Student Member

2023 – 2024 Society for the Neurobiology of Language

Student Member

2022 – 2023 Cognitive Neuroscience Society

## Undergraduate Student Member

# Skills and Other

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

Other

Certifications