

WILL DECKER

Email: jdecke5@lsu.edu; deckerwill7@gmail.com

Website: w-decker.github.io

EDUCATION

Bachelor of Science in Psychology, Minor in German

May 2024

Louisiana State University, Baton Rouge, Louisiana, USA

GPA: 3.8/4.0

Thesis: The Architecture of Auditory Statistical Learning

RESEARCH EXPERIENCE

Honors Thesis Student/Research Assistant

2023 - Present

Representations and Learning Laboratory

Louisiana State University, Baton Rouge, Louisiana, USA.

Principle Investigator: Christopher Cox, PhD.

- Develop clear research questions and hypotheses through self-lead literature reviews.
- Design and complete undergraduate honors thesis from start to finish using advanced neuroscientific techniques (neuroimaging and computational), critical scientific thinking and writing.
- Learn and apply mathematical/statistical concepts/models from cognitive neuroscience.
- MRI safety trained.

Project Coordinator

2022 - Present

Language Environment and NeuroDevelopment Laboratory

Louisiana State University, Baton Rouge, Louisiana, USA.

Principle Investigator: Julie M. Schneider, PhD.

- Create, execute and lead studies ranging in scientific topics that use EEG.
- Oversee team of undergraduate students learning and using EEG.
- Develop and implement analyses protocol and pipeline for EEG and functional magnetic resonance imaging (fMRI).
- Present research at internal, undergraduate and national level conferences and symposia.

Research Assistant

2021 – 2022

Language Environment and NeuroDevelopment Laboratory

Louisiana State University, Baton Rouge, Louisiana, USA.

Principle Investigator: Julie M. Schneider, PhD.

- Administer language assessments (TOPEL, PPVT, DELV) to children between the ages of 3-5 years.
- Run participants taking part in behavioral language research.
- Code language transcriptions using Systematic Analysis of Language Transcripts (SALT)
- Build/set up EEG system and protocol from start to finish.

PRESENTATIONS†

Decker, W., Schneider, J. M. (2023, July). 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. (2023, April). 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.* (2023, April). Effects of note-taking methods on learning. **Poster** presented at the annual Louisiana State University Discover Day Research Symposium, Baton Rouge, Louisiana, USA.

*Denotes equal contribution.

Forest, M., Lopez, S., **Decker, W.**, Schneider, J. M. (2023, April). 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. (2023, April). 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. (2023, April). 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. (2023, March). 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. (2023, March). 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, March). 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. (2022, November). Anxiety and Word Learning in College Students. **Poster** presented at the annual University of Louisiana at Lafayette Undergraduate Research Conference, Lafayette, Louisiana, USA. <https://osf.io/GNM8J>

Forest, M., Lopez, S., **Decker, W.**, Schneider, J. M. (2022, November). 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. (2022, November). 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. (2022, April). 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.
<https://osf.io/6W4JF>

†Copies of presentations in which I was first author or equal contributor can be found on my [GitHub](#).

HONORS AND AWARDS

Distinguished Undergraduate Researcher Candidate

May 2024

LSU Discover Undergraduate Research Program
Louisiana State University, Baton Rouge, Louisiana, USA.

FUNDING

LSU Discover Undergraduate Summer Research Grant

May – August 2023

LSU Discover Undergraduate Research Program
Louisiana State University, Baton Rouge, Louisiana, USA.

Project title: A Universal Preprocessing-Pipeline for Event-Related Potentials (ERPs) in Developmental Electroencephalography (EEG) Research.

Amount: \$3,000

MEMBERSHIPS AND AFFILIATIONS

Society for the Neurobiology of Language

2023 – Present

Student Member

Cognitive Neuroscience Society

2022 – Present

Undergraduate Student Member

SKILLS

| Computer, Programming, Analyses | Proficiency Level* |
|---------------------------------|--------------------|
| MATLAB | Intermediate |
| IBM SPSS Statistics | Intermediate |
| Git/GitHub | Intermediate |
| Python | Intermediate |
| R/R Markdown | Novice |
| Praat | Novice |
| Bash | Novice |
| HTML | Novice |
| CSS | Novice |
| JavaScript | Novice |

*Based on the [NIH Proficiency Scale](#). Refer to my [GitHub](#) for specific examples.

Languages

English
German

Proficiency Level

Native
C1

REFERENCES**Julie M. Schneider, Ph.D.**

Assistant Professor
Department of Communication Sciences and Disorders
College of Humanities and Social Sciences
Louisiana State University
Email: juschnei@lsu.edu

Christopher Cox, Ph.D.

Assistant Professor
Department of Psychology
College of Humanities and Social Sciences
Louisiana State University
Email: chriscox@lsu.edu

Gundela Hachmann, Ph.D.

Associate Professor
Department of World Languages, Literatures & Cultures
College of Humanities and Social Sciences
Louisiana State University
Email: ghachmann@lsu.edu