Will Decker

will.decker@gatech.edu.edu · w-decker.github.io

Research interests

General: Concepts, language, intelligence, neuroimaging, LLMs

Specific: Organization of language and complex meaning in biological and artificial systems
Developmental approaches to cognitive and computational neuroscience

Education

2024 – Present **Georgia Institute of Technology** – Atlanta, Georgia, USA
PhD, Psychology
Advisor: Prof. Anna (Anya) Ivanova

2020 – 2024 **Louisiana State University** – Baton Rouge, Louisiana, USA
B.S., Psychology
Advisors: Prof. Christopher R. Cox and Prof. Julie M. Schneider

Honors and scholarships

2024 Distinguished Undergraduate Researcher Medalist
Louisiana State University

2024 Paul C. Young Award for Outstanding Undergraduate in Psychology
Louisiana State University
Amount: $100

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   LSU Discover Distinguished Undergraduate Researcher Candidate Award
Louisiana State University

Publications

In prep   **Decker, W.**, Schneider, J. M. (registered report). When reducing noise in developmental EEG data, is EEG best left alone? *Developmental Cognitive Neuroscience.*

2025   Fan, T., **Decker, W.**, Momsen, J., Haebig, E., Schneider, J. M. 2024. The facilitatory role of rhyme during implicit and explicit word learning. *PsyArXiv.*

2024   Fan, T., **Decker, W.**, Schneider, J. M. 2024. The domain-general neural basis of auditory statistical learning in children. *Neurobiology of Language.*

Selected Conference Abstracts

2024   **Decker, W.** Schneider, J.M., Cox, C. 2024. Neural processes of statistical learning. Poster presented at the annual Louisiana State University Discover Day Research Symposium. Baton Rouge, Louisiana, USA.

2023   **Decker, W.**, Schneider J. M., Cox, C. 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. 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., Fan, T., Haebig, E., Schneider, J. M. 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.

2022   **Decker, W.**, Haebig, E., Schneider, J. M. 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

Decker, W., Schneider, J.M. 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

Talks and tutorials

2023   Using neuroimaging to examine statistical learning
Student Linguistics Meet-up, Louisiana State University

A pipeline for developmental EEG data
Joint meeting of the Department of Psychology and Department of Communication Sciences and Disorders, Louisiana State University

Funding

2023   A universal preprocessing-pipeline for event-related potentials (ERPs) in developmental electroencephalography (EEG) research.
Agency: LSU Discover Undergraduate Research Program, Louisiana State University
Amount: $3,000

Mentorship and service

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

Technical skills

Programming   Python, R, MATLAB, Bash/Shell

Software   Git/GitHub, LaTeX/Overleaf