# **Zach Studdiford**

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## **EDUCATION**

# **University of Wisconsin-Madison**

Madison, WI

B.S, Computer Science

Expected May, 2026

B.S, Psychology

Advisors: Gary Lupyan, Timothy T. Rogers

General honors

#### **PREPRINTS**

- **Studdiford, Z.**, Rogers, T. T., Suresh, S., & Mukherjee, K. (2025). Uncovering the Computational Ingredients of Human-Like Representations in LLMs. *arXiv* preprint *arXiv*: 2510.01030.
- **Studdiford, Z.**, Rogers, T. T., Suresh, S., & Mukherjee, K. (2025). Evaluating Steering Techniques using Human Similarity Judgments. *arXiv* preprint arXiv:2505.19333.

#### PEER-REVIEWED PROCEEDINGS

- **Studdiford, Z.**, & Lupyan, G. Contextual Effects in LLM and Human Causal Reasoning. -In *ICML 2025 Workshop on Assessing World Models*.
- **Studdiford, Z.**, Liu, Q., Li, Y., Zhang, Z., & Lupyan, G. (2025). Evolution on the Lexical Workbench: Disentangling Frequency, Centrality, and Polysemy in Language Evolution. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 47).
- Chuang, Y. S., Nirunwiroj, K., **Studdiford, Z.**, Goyal, A., Frigo, V., Yang, S., ... & Rogers, T. (2024, November). Beyond Demographics: Aligning Role-playing LLM-based Agents Using Human Belief Networks. In *Findings of the Association for Computational Linguistics: EMNLP 2024* (pp. 14010-14026).

## **CONFERENCE PRESENTATIONS**

- **Studdiford, Z.**, & Lupyan, G. Wrong for the Right Reason? Using Success and Failures of Large Language Models to Understand Human Causal Reasoning. Poster presented at the 46th Annual Meeting of the Cognitive Science Society.
- **Studdiford, Z.**, & Lupyan, G. Contextual Effects in LLM and Human Causal Reasoning. Poster presented at the 1<sup>st</sup> ICML Workshop on Assessing World Models.
- **Studdiford, Z.**, Liu, Q., Li, Y., Zhang, Z., & Lupyan, G. (2025). Evolution on the Lexical Workbench: Disentangling Frequency, Centrality, and Polysemy in Language Evolution. Poster presented at the 46th Annual Meeting of the Cognitive Science Society.

#### **GRANTS & FELLOWSHIPS**

#### ACADEMIC SERVICE

# Reviewing

Proceedings of the National Academy of Sciences

Findings of the Association for Computational Linguistics: EMNLP

#### PROFESSIONAL EXPERIENCE

Milwaukee Tool Milwaukee, WI

Software Development Intern

May 2024 – August 2024

• Created and managed lambdas in AWS to support inventory operations

- Work with product management and UX teams to design new user inventory functionality
- Developed new customer-facing operations in .NET to improve the efficiency of tool transfers

# Field Day Learning Games

Madison, WI

Data Scientist

February 2023 – September 2024

- Developed and maintain open-source pipelines for streaming and processing large-scale gameplay data
- Created statistical models to assess the efficacy of educational games for learning
- Presented research findings to external collaborators and stakeholderss

### **Synchrono LLC**

Minneapolis, MN

Software Development Intern

May 2023 – August 2023

- Wrote SQL stored procedures to query data across customer databases
- Refactored existing VisualBasic pages in C# and VueJS
- Collaborated with product management teams to design APIs to meet new customer requirements

### REFERENCES

**Dr. Gary Lupyan** | University of Wisconsin-Madison, Department of Psychology

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**Dr. Timothy T. Rogers** | University of Wisconsin-Madison, Department of Psychology

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Dr. Qiawen Liu | Princeton University, Department of Psychology and

Department of Computer Science

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