# Jannik Brinkmann

### jannik.brinkmann@uni-mannheim.de | jannik-brinkmann.github.io

### RESEARCH EXPERIENCE

# Northeastern University Visiting Researcher under supervision of David Bau. EDUCATION University of Mannheim Ph.D. in Computer Science University of Mannheim M.Sc. in Data Science - GPA: 3.8 out of 4.0 (with Distinction) Baden-Württemberg State University B.Sc. in Business Informatics - GPA: 3.8 out of 4.0 (Best in Class)

### Publications

## A Mechanistic Analysis of a Transformer Trained on a Symbolic Multi-Step Reasoning Task

J. Brinkmann\*, A. Sheshadri\*, V. Levoso\*, Paul Swoboda, Christian Bartelt.

Association for Computational Linguistics (ACL) Findings, 2024.

### Backward Chaining Circuits in a Transformer Trained on a Symbolic Reasoning Task

J. Brinkmann\*, A. Sheshadri\*, V. Levoso\*, Paul Swoboda, Christian Bartelt.

ICLR Workshop on Mathematical and Empirical Understanding of Foundation Models, 2024.

### A Multidimensional Analysis of Social Biases in Vision Transformers

J. Brinkmann, P. Swoboda, C. Bartelt.

International Conference on Computer Vision (ICCV), 2023.

### Talks

### Understanding the Reasoning Mechanisms in Language Models

- Institute for Visual and Analytic Computing at University of Rostock, Apr. 2024.
- Computer Vision and Learning Lab at University of Heidelberg, Feb. 2024.

### SERVICE

### Reviews

NeurIPS (2024), ICLR SeT-LLM (2024), CVPR (2024), ECAI (2023)

### OTHER EXPERIENCE

### **Technical Consultant - Enterprise Solutions**

Fresenius SE & Co. KGaA

# Honors and Awards

2021 Outstanding Master Thesis – University of Mannheim

2019 Best in Class – Baden-Württemberg State University

Jan. 2019 – Dec. 2021

<sup>\*</sup> indicates equal contribution.