Caleb Schultz Kisby

RESEARCH INTERESTS

- Logical foundations of artificial intelligence
- Neuro-symbolic AI

- Dynamic logics for belief revision and learning
- Neural network verification and alignment

EDUCATION

- 2018 PRESENT **PhD Candidate**, Indiana University, Bloomington, USA PhD in Computer Science (in progress), minor in Logic. Jointly advised by Larry Moss and Saúl A. Blanco
 - 2014 2018 **Bachelors**, University of South Carolina, Columbia, USA BSCS in Computer Science, BS in Mathematics, *Summa Cum Laude*

SELECTED HONORS AND AWARDS

MAY 2025 Received the Robert K. Meyer Graduate Fellowship in Logic, Indiana University

MAR 2024 Received the SCALE Ambassador Award, US Department of Defense

MAY 2022 "The Logic of Hebbian Learning" nominated for Best Student Paper at FLAIRS 2022

AUG 2019 Received the Paul Purdom Fellowship, awarded to one outstanding PhD student each year with interests in theoretical computer science, Indiana University

JAN 2017 Received the Magellan Scholar Undergraduate Research Grant, USC Columbia

INVITED TALKS AND WORKSHOPS

- JUN 2025 Course for the North American Summer School for Logic, Language and Information, co-teaching with Nina Gierasimczuk
 Course Title: Computational Learning in Dynamic Logics

 SEP 2024 Seminar on Logic and Interactive Rationality (LIRa), Institute for Logic, Language, and Computation (ILLC), University of Amsterdam, Online
 The Modeling Power of Neural Networks

 LAN 2024 1st General Algebra, Logic & Al Workshop, Chapman University, Orange, USA
- JAN 2024 1st General Algebra, Logic & AI Workshop, Chapman University, Orange, USA Logical Dynamics of Neural Network Learning

SELECTED CONFERENCE TALKS

- FEB 2024 AAAI Conference on Artificial Intelligence, Vancouver, Canada Reduction Axioms for Iterated Hebbian Learning
- MAY 2022 The International Florida AI Research Society Conference (FLAIRS), Jensen Beach, USA The Logic of Hebbian Learning

OTHER PROFESSIONAL ACTIVITIES

Volunteer for the AAAI Conference on Artificial Intelligence, Vancouver, Canada
 NOV 2023 Reviewer for the AAAI Workshop on Neuro-Symbolic Learning and Reasoning in the era of Large Language Models (NucLeaR)
 JUL 2023 Participated in the Workshop on Neural-Symbolic Learning and Reasoning, Siena, Italy
 JUN 2023 Local Organizer for Algebra and Coalgebra in Computer Science (CALCO), & Mathematical Foundations of Programming Semantics (MFPS), Bloomington, USA
 SEP 2019 Reviewer for the Journal of Logic, Language, and Information (JoLLI)