# Coby L. Kassner

 Student researcher with broad interests in AI safety and mechanistic interpretability.

# **Experience**

**Research Fellow** 

February 2025-Present

Supervised Program for Alignment Research

- · Researching neural networks that are inherently interpretable, mentored by Dr. Ronak Mehta
- · Measuring viability and interpretability of simplex-constrained neural network architectures

#### **Student Researcher**

2024-Present

Julia Student Research Group

- Headed project to extract synthetic training data from a fine-tuned Llama 3.1 8B instance
- · Utilized contrastive activation addition to steer model outputs towards memorized examples
- Achieved ~2x baseline success rate, placing 7th in the LLM Privacy Challenge, Red Team, at NeurIPS 2024

Student Researcher Summer 2024

Association of Students for Research in Artificial Intelligence

- · Led project in natural language processing to understand dis/misinformation in the context of LLMs
- · Benchmarked LLM fact-checking performance across 5 languages and several prompting techniques

### Vice President, Outreach

2023-Present

International Research Olympiad

- Directed program to start over 280 research clubs in secondary schools across 35 countries and 5 continents
- Collaborated with leadership team to coordinate over 50 student volunteers and negotiate over \$15,000 in sponsorships to fund research clubs and in-person finals

## Education

## Statistics and Data Science, B.S.

2025-2029

Yale College

## Computer Science, Mathematics, $2 \times A.S.$

2021-2025

Arapahoe Community College

#### **High School Diploma**

2021-2025

Colorado Early Colleges Douglas County North

## **Technical Skills**

**Research Experience:** Steering/activation engineering with LLMs, physics-informed ML (PINNs, Fourier features, PINOs), genetic algorithms (NEAT, Hyper-NEAT, CPPNs)

Libraries: Transformers, PyTorch, JAX, Scikit-Learn, Pandas, NumPy, Transformer Lens

Languages: Python, C++, SQL