Theodore Ehrenborg theodore.ehrenborg@gmail.com ehrenborg.dev

Work

May 2025 – Present	Researcher, Beneficial AI Foundation Using formal verification to check AI-written software
Feb 2025 – Mar 2025	Technical AI Safety Fellow, Pivotal Research. Mentor: Logan Riggs Smith
Jan 2024 – Jan 2025	Senior Machine Learning Engineer, Myrtle.ai, Cambridge, UK For our CAIMAN-ASR product, I - stayed current with the speech recognition literature - ran experiments to reduce word error rate. See ehrenborg.dev/caiman - debugged hardware problems in our on-premise GPU servers - interviewed applicants and interacted with potential customers
Sept 2022 – Dec 2023	Junior Machine Learning Engineer, Myrtle.ai
Summer 2022	Machine Learning Intern, Myrtle.ai Designed voice activity detector, created dataset, and trained LSTM RNNs.

Research

March 2025	Discovered symlink exploit in Vast.ai. Awarded bug bounty. See ehrenborg.dev/exploit
Spring 2025	Mechanistic interpretability project at Pivotal Research. See ehrenborg.dev/absorption
Sep 2025	Second author on "A benchmark for vericoding: formally verified program synthesis".

GitHub github.com/TheodoreEhrenborg

Author of sae.ehrenborg.dev
Trains a sparse autoencoder on a 33 million parameter language model (LM)
Author of rl.ehrenborg.dev
Uses reinforcement learning to make a LM generate stories with alliteration

GitHub while at Myrtle.ai github.com/TheoEhrenborg

Contributor to github.com/MyrtleSoftware/caiman-asr
Author of 412 of the 926 merged pull requests, which include:
- Increasing long-audio validation speed by 8x
- Random State Passing, which decreased long-audio word-error-rate by ~40% relative

Reviewed 382 of the other 514 merged pull requests
Released v1.9.0, v1.10.1, and v1.11.0

Education

2019 – 2022	University of Cambridge, Cambridge, England BA Mathematics, Clare College. Year 1: Not classed due to pandemic. Year 2: Class I. Year 3: Class II.i. I was awarded a Cambridge Trust Scholarship, 10000 GBP per year for 4 years.
2015 – 2019	Henry Clay High School, Lexington, KY, USA SAT score: 1600 out of 1600. ACT score: 36 out of 36. 13 AP courses: all scores 5 out of 5.

Computer Experience

Fluent in: Python, PyTorch, Docker, Git, Github Actions, Linux, WordPress, & LaTeX
Have also used for work: Rust, Nix, Elm, AWS, Compute Engine, Vast.ai, Hydra CI, Dafny, Verus, & Rocq
Have also used: Lean 4, Julia, Java, Keras, SageMath, & Octave

Extracurriculars

Winter 2019 – Spring 2020	Imperial College Mathematics Competition, tied for 43rd place nationally
May 2018	Intel International Science and Engineering Fair, "Pythagorean Quintuples and Quaternions" won a 3rd award in math