Theodore Ehrenborg theodore.ehrenborg@gmail.com https://ehrenborg.dev/

Work Experience

Feb 2025 – Mar 2025 Technical AI Safety Fellow, Pivotal Research
Pivotal Fellows do research on a global catastrophic risk for 9 weeks.

Jan 2024 – Jan 2025 Senior Machine Learning Engineer, Myrtle.ai, Cambridge, UK
For our CAIMAN-ASR product, I
- stayed current with the literature
- ran experiments to reduce word error rate
- debugged hardware problems in our on-premise GPU servers
- tested code and made public releases
- 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 speech detection system, created dataset, and trained LSTM RNNs.

Personal GitHub https://github.com/TheodoreEhrenborg

Author of https://sae.ehrenborg.dev/
Trains a sparse autoencoder on a 33 million parameter language model (LM)

Author of https://rl.ehrenborg.dev/
Uses reinforcement learning to make a LM generate stories with alliteration

Work GitHub https://github.com/TheoEhrenborg

Contributor to https://github.com/MyrtleSoftware/caiman-asr
Author of 412 of the 926 merged pull requests, which include:
- A major refactor of this 14000-line-of-code repository
- 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, Hydra CI, & Google Compute Engine
Have also used: Lean 4, Julia, Keras, SageMath, Octave, Vast.ai, AWS, & Java

Languages

English: Native speaker
French: Completed 5 years of instruction including AP French

Extracurriculars

Winter 2019 – Spring 2020 Imperial College Mathematics Competition (a national UK contest)
I qualified for the second (and final) round and tied for 43rd place.

May 2018 Intel International Science and Engineering Fair (ISEF)
ISEF is the largest international high school science fair. My project, "Pythagorean Quintuples and Quaternions", won a 3rd award in math