

THEODORE EHRENBORG theodore.ehrenborg@gmail.com <https://ehrenborg.dev/>

WORK EXPERIENCE

Jan 2024 – Senior Machine Learning Engineer, Myrtle.ai, Cambridge, UK
For our CAIMAN-ASR product, I

- stay current with recent advances in the literature
- run experiments to reduce word error rate
- debug hardware problems in our on-premise GPU servers
- test code and make public releases
- interview applicants and interact 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)
Intel ISEF is the largest international high school science fair in the world. I won a 3rd award (\$1000) in mathematics for my project, “Pythagorean Quintuples and Quaternions”.