Evan Ryan Gunter

evgunter@gmail.com website github 510 812 7851

Professional Experience

Personal projects (see below) 03/24—10/24

ML Alignment & Theory Scholars

Research Scholar – David Lindner collab: Evžen Wybitul, Mikhail Seleznyov 01/24—03/24

Made vision/language model benchmark to assess VLM models as RL process supervisors

Long-Term Future Fund Grantee 09/23—01/24

Investigated loss landscape geometry theoretically using results from high-dimensional math and physics; tested related predictions of Singular Learning Theory

Research Scholar – Victoria Krakovna collab: Yevgeny Liokumovich 06/23—09/23

Studied stability of power-seeking for MDPs [x]; improved formalism of power as optionality [x]

Granica

Research Engineer 02/22—07/23

Data compression research; used black box optimization, sketch algorithms, statistical modeling, Bayesian estimation, spectral clustering, integer linear programming, singular value thresholding

Software Engineer 02/21—02/22

Configured cloud infrastructure for data compression platform; developed interfacing tools

Berkeley Existential Risk Initiative *Research Assistant to Anders Sandberg* 04/21—12/21

For book draft, checked physics calculations; advised on philosophy and other content in 1-1s

Theorem LP *Engineering Intern* 07/18—09/18

Detected duplicate applications using nearest neighbor search in SQL; configured ETL pipeline

California Institute of Technology

Head Deans' Tutor: Ma 1, Ph 1; TA: CS 4, Ma/CS 6a, Bi 1; Peer Tutor, Writing 04/16—06/19

Summer Undergraduate Research Fellowship advisor: Erik Winfree 06/17—08/17

Implementation of randomized algorithms with stochastic chemical reaction networks

JPL Science Data Modeling and Computing Group *Intern* 07/16—09/16

Education

California Institute of Technology

BS Mathematics, BS Computer Science, BS Philosophy 3.6 GPA 09/15—06/19

Only 2019 triple major; 8 A+'s; research in CS and philosophy; thesis in philosophy of physics; 14 physics courses (3 grad-level); peer tutoring and TAing in CS, math, writing, and physics

Projects

Independent 05/23—10/24

Personalized ML chording keymap optimization, Rust macros to control expansion order of other macros, GPT-4 bot, improved dependency repos [x][x], found a high-severity security bug in Android

Mentorship for Alignment Research Students (MARS) *Mentor* 01/24—05/24

Mentored students in projects on loss landscape geometry with different optimizers [x], extending deep linear net minima results to permit ReLUs, and how fast model training Markov chains "mix"

California Institute of Technology

Undergraduate Projects in C.S. advisor: Mike Vanier collab: Aidan Swope 04/19—06/19

Investigated AlphaZero-inspired tree search for automated theorem proving

Philosophy thesis advisor: Chip Sebens Anthropic reasoning in infinite worlds 09/18—06/19

Argued that self-indication assumption is less arbitrary than Bostrom's self-selection assumption; addressed mathematical issues in infinite worlds; applied findings to spacetime dimensionality

Reading in Philosophy advisor: Frederick Eberhardt collab: Alex Denko 01/19—04/19

Papers on Russellian monism, mathematical universe hypothesis; population ethics, panpsychism