Evan Ryan Gunter

evgunter@gmail.com evgunter.github.io 510 812 7851

Education

California Institute of Technology 9/15—6/19

BS in Mathematics, BS in Computer Science, and BS in Philosophy

GPA 3.6 overall, 4.0 philosophy; eight A+'s; only triple major in my graduating class; 14 physics courses, including 3 graduate-level courses; thesis in philosophy of physics; research in CS and philosophy; peer tutoring and teaching assistance in CS, math, writing, physics

Research Experience

California Institute of Technology

Philosophy thesis adv. Sebens *Anthropic reasoning in infinite worlds* 9/18—6/19

Argued that the Self-Indication Assumption for anthropic reasoning is less arbitrary, more predictive, and has fewer counterintuitive consequences than the more widely accepted Self-Selection Assumption; addressed mathematical issues with anthropic reasoning in infinite worlds; applied my findings to the example of spacetime dimensionality

Reading in Philosophy adv. Eberhardt 1/19—4/19

With another student, wrote two papers: one on Russellian monism and the mathematical universe hypothesis, and one on personal identity and the repugnant conclusion

Undergraduate Projects in Computer Science adv. Vanier 4/19—6/19

With another student, applied AlphaZero-inspired machine learning techniques for efficient tree search to automated theorem proving

Summer Undergraduate Research Fellowship adv. Winfree 6/17—8/17

Studied the implementation of randomized algorithms with stochastic chemical reaction networks; developed example algorithms and proved performance bounds for them

University of California, Berkeley (Concurrent Enrollment)

Linguistics Research Apprentice Practicum (Ling. 197) 1/15—5/15

Prepared phonetics data for analysis; made a script to do some preparation programatically

Linguistic Typology (Ling. 222) 1/14—5/14

Synthesized linguistic data into original analyses; wrote 40-page research paper on syntactic phenomena in the language Kolyma Yukaghir

Introduction to Phonetics and Phonology (Ling. 110) 8/13—12/13

Collected and analyzed phonetic data; wrote 20-page research paper on Mandarin phonetics

Professional Experience

Project N (Stealth Startup)

Research Engineer 2/22—present

Used black box optimization, sketch algorithms, statistical modeling, spectral analysis, data imputation, and machine learning in data compression research

Software Engineer 2/21—2/22

Streamlined the cloud infrastructure deployment process and CLI for a data compression product; improved internal tools for reducing costs and building packages

Berkeley Existential Risk Initiative

Research Assistant to Anders Sandberg 4/21—12/21

Provided assistance on a draft of Anders' upcoming book: checked physics derivations and facts and discussed the philosophical and scientific content in weekly one-on-one meetings

Theorem *Engineering Intern* 7/18—9/18

Developed a tool for efficiently analyzing a large dataset; created a custom serialization scheme to increase performance; configured cloud data pipelines

Jet Propulsion Laboratory *Intern* 7/16—9/16

Working in the Science Data Modeling and Computing Group, updated the data processing pipeline for Climate Model Diagnostic Analyzer for increased generality and reliability

Teaching Experience

California Institute of Technology

Head Deans' Tutor, Calculus of One and Several Variables & Linear Algebra 9/18—6/19

Head Deans' Tutor, Classical Mechanics and Electromagnetism 4/18—6/18

Deans' Tutor, misc. math, physics, and computer science courses 9/16—6/19

Teaching Assistant: Fundamentals of Computer Programming 1/19—3/19

Teaching Assistant: Introduction to Discrete Mathematics 9/18—12/18

Teaching Assistant: Principles of Biology 4/18—6/18

Peer Tutor, Hixon Writing Center 4/16—6/19