

Evan Ryan Gunter

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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, Science Data Modeling and Computing Group 7/16—9/16

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