James Sanders

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Education

Rice University, *Houston, TX* — **Graduated December 2022**
B.A. in Mathematics*, cum laude* (GPA: 3.91/4.0), *Phi Beta Kappa*
Significant coursework in *Economics*, *Philosophy*, and *Computer Science*
Relevant Coursework: *Artificial Intelligence, Econometrics, Reasoning about Algorithms, Game Theory, Social and Political Philosophy, Real Analysis, Microeconomics, Macroeconomics*

Economic Theory and Global Priorities Workshop, *Oxford, UK* — **August 2022**
- Studied economic theory relevant to AI takeoff speeds, AI & the labor force, and long-term growth.

ARENA Machine Learning Alignment Coursework — **May 2023 - July 2023**
- Learned to conduct and fully implement independent mechanistic interpretability and reinforcement learning research.

Skills

- Python, Machine learning in Pytorch, R, GIS, MATLAB
- Proficient in Spanish

Relevant Experience

Associate Data Analyst, *Epoch AI* — **July 2024 - Present**
- Published paper analyzing trends in AI supercomputers, after compiling the largest existing public dataset of such systems
- Curated and analyzed data relevant to discerning trends in AI, such as the implied amount of compute used in historical machine learning papers and the economics of large datacenters.

Quant Trader, *Susquehanna International Group* — **May 2022-Aug 2022 (intern) and Aug 2023-May 2024**
- Developed internal software apps to analyze relevant geopolitical and economic signals.
- Provided real-time liquidity as a market maker in housing index equity options.
- Analyzed and attempted to predict world events such as elections and policy changes.

SERI Machine Alignment Theory Scholars Training Program Participant — **June 2023-July 2023**
- Studied AI agent foundations and research methods under John Wentworth.
- Conducted ML experiments in Pytorch that were relevant to interpretability and research design.

Teaching Assistant, *Comp 382: Reasoning about algorithms, Rice University* — **October 2021-December 2021**

NASA DEVELOP Tech Lead, *Space Science and Applications, Inc.* — **January 2021-April 2021**
- Used NASA's Earth-observing satellites Landsat 8 and MODIS to analyze urban heat island effects in Austin Texas through R, GIS, and Google Earth Engine.
- Worked with the City of Austin and created a map of heat vulnerability that weighted environmental and social factors that contributed to heat vulnerability.

Algorithmic Genomic Sequencing Researcher, *Rice Cancer Bioinformatics REU* — **May 2020-August 2020**
- Led a team of 4 undergraduates on a computational project analyzing different algorithms for detecting single nucleotide variations given incomplete genomic data from single-cell sequencing.

Leadership Experience

Friends Meeting of Washington, *Finance and Stewardship Committee Member* — **January 2025-Present**
- Oversaw million dollar annual budget for operating the Friends Meeting of Washington

Rice Impactful Careers and Giving, *President* — **September 2020-December 2022**
- Founded club to help students pursue impactful careers & build a community for effectively doing good.

Eagle Scout

Completed the Texas Water Safari (known as the toughest canoe race in the world)