CURRICULUM VITAE - PAUL RAPOPORT

THIS RESUME IS UP TO DATE AS OF NOVEMBER 2024.

Contact Information

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Employment, Education, and Skills

- Summer 2024: Machine Learning and Alignment Theory Scholars (MATS) Program Scholar. Tsvi Benson-Tilsen, solo mentorship.
  - Skills: Additional Python and SQL as applied to large datasets; working with causal/Pearlian inference and Bayes nets; working familiarity with machine learning systems, both on the specifics of frontier models and from an AI safety perspective.

- Late 2023 ∼ Early 2024: Independent researcher for OpenPhilanthropy's Long-Term Future Scholarship program.
- Late 2023 ∼ Mid 2024: Independent researcher for the Center for Long-term Risk.

- Summer 2023: MATS Participant. John Wentworth, offsite track.
  - Skills: Working knowledge of research coding in Python and pytorch, mathematical modeling,.

- Fall 2022 ∼ Spring 2023: Research-Track Postdoctoral Instructor at Temple University.

- Enrolled in doctoral program from 2015 ∼ 2021. Completed MS in May 2017; Master's thesis available on request. Defended PhD thesis in May 2021. Graduated in December 2021.
  - Fall 2015 ∼ Fall 2020: Graduate TA at the University of Illinois at Chicago.
  - Thesis: "On the profinite distinguishability of hyperbolic Dehn fillings of finite-volume 3-manifolds". Advisor: Professor Daniel Groves. Defended in May 2021, socially distanced.
  - Skills: Research habits and taste; pedagogy and classroom management; more advanced math, including category theory, geometric group theory, and model theory; basic Python and SQL.

- Fall 2016 ∼ Spring 2017: Work at the Mathematical Computing Lab at UIC in the Print Lab, which involved 3D modeling in Blender and Fusion360, 3D printing, and programming.
- Fall 2015 ∼ Spring 2023: Teaching positions at UIC and Temple, which involved teaching Mathematical Reasoning, Precalculus, Calculus I, and Calculus II, and grading for all of the previous classes as well as for Calculus III.

- Fall 2011 ∼ Spring 2015: AB: Princeton University. Concentration in mathematics. Awarded in May 2015. Junior and senior theses available on request.
  - Skills: Mathematics and quantitative reasoning; programming, including working knowledge of MATLAB, LaTeX, Python, and Java for experimental data processing; molecular biology (integrated science curriculum) and linguistics courses not reflected in my degree; original research during summer programs in molecular biology and topology.

Preprints, Publications, and Code

- "On the profinite distinguishability of hyperbolic Dehn fillings of finite-volume 3-manifolds", found at https://arxiv.org/abs/2102.10445. Accepted for publication to the Journal of Algebraic and Geometric Topology as of 2023-10-01.

- "Untangling infrabayesianism: a redistillation", along with some unpublished minor results regarding infrabayesian agents playing population games. Available on request.

- Github: `https://github.com/Lorxus/Portfolio/`