Rohan Kapoor

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EDUCATION

Dartmouth College

PhD in Mathematics University of Chicago BA in Mathematics (with Honors), Minor in Physics Finished coursework for MS in Statistics, Dean's List 2021-22

Experience

Exponent Fellow

National Museum of Mathematics

New York City, NY • Selected for a year-long fellowship as a museum docent and math education. Work with leading mathematicians on research and outreach.

Quantitative Trading Intern

IMC Trading

- Used Pandas and SQL to analyze equity options wholesaling data. Implemented profit-making improvements to IMC's payment for order flow(PFOF) decision-making automated system.
- Attended classes in options, market, and game theory. Competed in algorithmic mock trading. Shadowed traders on all desks

Teaching Assistant

Mathematics Department

- Junior Tutor for introductory calculus, and Grader for Real Analysis 1 and Abstract Linear Algebra
- Counsellor for the Young Scholars Program: a summer camp on number theory for students in Chicago Public Schools

Research Associate

Ferguson Lab, Pritzker School of Molecular Engineering

- Leveraged the Midway Research Computing Cluster to run large, parallelized molecular simulations on GPUs to test fitness of compounds for drug delivery
- Applied Gaussian Process Regressions and Bayesian Optimization to speed up the discovery process and suggest new compounds to simulate.
- Co-authored paper on the research work published in Molecular Systems Design Engineering, a leading journal in the field.

Summer Research Intern

Strand Life Sciences

• Implemented a within-exome approach to detecting Copy Number Variations (CNVs) to more efficiently analyze large genetic data sets obtained from Next Gen Sequencing(NGS).

Activities and Leadership

President, Founding Member

UChicago Applied Math Club

- Networked with leading faculty and grad students to organize weekly lectures in applied math and science fields.
- Pursued an intensive marketing strategy to get turnout for virtual events: resulted in a 200% increase in turnout for talks and saw larger turnouts over Zoom than similar STEM RSOs.

Varsity Debater, Chancellor

Chicago Debate Society

- Ranked 9th individual best speaker in North America at North American Debate Championships, runners up team at US Universities Debate Championships, a top 48 team at the World Universities Debating Championships
- Coached the Indian National Team in 2021 and 2023. The team was the top-ranked team in the preliminary rounds of the World Championships.

Academic Honors

Joint Entrance Exam(JEE Advanced): All India Rank 2715 For admission to IITs, written by 1 million people annually. **KVPY**: All India Rank 203, awarded scholarship to pursue further studies in STEM up to PhD level. National Talent Search Examination: National Level NTSE Scholar, 1 of 700 chosen out of 1 million in a two-stage process. Indian National Mathematical Olympiad Training Camp: by invitation after the Regional Math Olympiad. Top 40 in Karnataka state.

Skills and Interests

Languages: English (Native), Hindi (Native), Sanskrit (Limited) Computer Languages: Python (numpy, scikit-learn, pandas, mdtraj, pytorch), R, Unix Shell, SQL, C++ Skills: Quantitative problem-solving, Teaching, Public speaking & Scientific explanation, Scientific literacy Interests: Formula 1, Mountaineering, Rock climbing, Fantasy and Science Fiction novels

Hanover, NH Incoming, Sep 2024 Chicago, IL Sep 2019-June 2023

Aug 2023 - Apr 2024

Jun 2022 - Aug 2022

Jun 2020 - Jun 2022

Jan 2021-Sep 2021

Chicago, IL

UChicago

UChicago

Sep 2020-Present

UChicago

Jun-Sep 2020

Bangalore, India

Sep 2019- Present

UChicago, IL