Ishaan Patkar

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ishaan-patkar.github.io

Education

- UC Berkeley, Mathematics B.A. (2021 - Present)
- Henry M. Gunn High School (2017 - 2021)

Coursework

UC Berkeley (2021 - Present)

Spring 2023 (In Progress)

- Commutative Algebra (Math 250B). Graduate course.
- Introduction to Topology and Analysis (Math 202B). Graduate course.
- Honors Introduction to Complex Analysis (Math H185). Honors upper division course.

Fall 2022

- Groups, Rings, and Fields (Math 250A). Graduate course, received A.
- Introduction to Topology and Analysis (Math 202A). Graduate course, received A-.
- Honors Linear Algebra (Math H110). Honors upper division course, received A+.

Spring 2022

- Honors Introduction to Abstract Algebra (Math H113). Honors upper division course, received A+.
- Introduction to Real Analysis (Math 104). Upper division course, received A+.
- Honors Multivariable Calculus (Math H53). Honors lower division course, received A+.

Spring 2022

- Honors Linear Algebra and Differential Equations (Math H54). Honors lower division course, received A+.
- Discrete Mathematics (Math 55). Lower division course, received A+.

High School (2017-2021)

In high school, I took several courses at Euler Circle, which is a mathematics institute run by Simon Rubinstein-Salzedo offering college-level classes to high school students.

Summer 2021

- Combinatorics, at Euler Circle. At the level of a college upper division course.

Fall 2020

- Markov Chains, at Euler Circle. At the level of a college upper division course.

Summer 2020

– Ross Mathematics Program. On number theory.

Spring 2020

– Abstract Algebra, at Euler Circle. At the level of a college upper division (third- or fourth-year) course.

Winter 2020

– Transition to Proofs: Combinatorics, at Euler Circle. At the level of a college lower division course.

Fall 2020

– Transition to Proofs: Number Theory, at Euler Circle. At the level of a college lower division course.

Expository Papers

– "An Introduction to the Metric Topology of $\mathbb{R}^n$." For Honors Multivariable Calculus (Math H53) at UC Berkeley. 2022.

– "An Introduction to Probability Theory." For Honors Multivariable Calculus (Math H53) at UC Berkeley. 2022.

– "Limit Rules in $\mathbb{R}^n$." For Honors Multivariable Calculus (Math H53) at UC Berkeley. 2022.

– "Catalan Numbers." For Combinatorics at Euler Circle. 2021.

– "An Axiomatic Introduction to Formal Probability Theory." For Markov Chains at Euler Circle. 2020.

– "Free Groups and Presentations." For Abstract Algebra at Euler Circle. 2020.

– "Random Number Generators." For precalculus at Henry M. Gunn High School. 2020. With Tong Miao.

Examinations and Awards

– Scored top 500 in the William Lowell Putnam Mathematical Competition held in 2021.

– Qualified for American Invitational Mathematics Examination in 2019, 2020, 2021.

– National Merit Scholarship Semifinalist.

– Self-studied for the AP BC Calculus examination in 2020; scored 5.

– Self-studied for the AP Computer Science A examination in 2018; scored 5.