

Avinash Iyer

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ABOUT ME Collaborative, academically-adept undergraduate seeking PhD programs in analysis, with a particular interest in operator theory and operator algebras.

EDUCATION *Bachelor of Arts* in Mathematics May 2025 (Expected)
GPA: 3.93
Occidental College, Los Angeles, CA

RELEVANT COURSES **Completed Courses:** Linear Algebra, Abstract Algebra, Topology, Graph Theory, Real Analysis, Real Analysis II (Metric Spaces and Measure Theory), Algebra II (Ring Theory, Field Theory, and Galois Theory), Complex Analysis.

Planned Courses (Fall 2024): Ordinary Differential Equations, Set Theory and the Foundations of Mathematics, Mathematical Methods in Physics, Advanced Linear Algebra, Amenability and C^* -Algebras (Honors Thesis independent study).

Planned Courses (Spring 2025): Partial Differential Equations, Numerical Analysis, Quantum Mechanics, Statistical Physics.

PROJECTS AND PAPERS *Research Experience for Undergraduates:* NSF-REU at Texas A&M-Commerce, member of the Complex Analysis research group under Dr. Mehmet Celik, studying excess area identities under operators on particular function spaces.

Power BI Full Floor Dashboard: project during internship at Onto Innovation, using Power Queries to harmonize different tool families' information, and used Synoptic Panel to visualize data.

Personal Website: used GitHub Pages and Jekyll to create a website for a portfolio in college.

AWARDS AND HONORS Dean's List Fall 2021–Spring 2024
President's Scholarship Fall 2021–Present

WORK
EXPERIENCE

Section Editor September 2023–Present
The Occidental

- Worked with senior team, co-editors, and writers to ensure high-quality opinion articles.
- Managed demanding weekly schedule while full-time student in upper division math and economics courses.
- Ensured all articles were harmonized with AP Style.

Staff Writer January 2022–Present
The Occidental

- Authored over 20 articles, including reported stories and opinions.
- Interviewed at least 3 sources per reported story, met demanding weekly schedule.
- Worked with editors to ensure high-quality story.

Data Analytics Intern May 2023–August 2023
Onto Innovation, Milpitas, CA

- Worked on process development within Metrology Business Unit.
- Improved Power Automate workflows for process improvements across 3 product families.
- Integrated data sources from manufacturing plans and floor information to create Power BI reports that provided at-a-glance understanding of state of manufacturing.

Grader September 2022–May 2023
Mathematics and Economics Departments, Occidental College

- Provided extensive feedback for student assignments in Intermediate Microeconomics and Calculus I.
- Maintained standards and deadlines alongside demanding class schedule and work for the newspaper.

SPECIALIZED
SKILLS

Languages: Proficient in \LaTeX , have used SQL, Mathematica, Python, and R

Enterprise Software: Microsoft Office and Microsoft Power Platform

Spatial Thinking and Reasoning

Mathematics and Computation