

ADITHYA BHASKARA

Boulder, CO
officialadithya.github.io

References available upon request.
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Google Scholar

EDUCATION

- University of Colorado Boulder** Boulder, Colorado
Bachelor of Science - Computer Science; Bachelor of Arts - Mathematics *August, 2022 - (Expected) May, 2026*
Major GPA: 4.000, Cumulative GPA: 3.987 (as of Dec. 2024)
Relevant Coursework: 6 Graduate Courses: Linear and Integer Programming, Algebra, Theory of Computation, Design and Analysis of Algorithms, Advanced Algorithms (In Progress), Algorithmic Economics (In Progress) Complexity Theory (Audit)
- Front Range Community College** Longmont, Colorado
High School Concurrent Enrollment *June, 2021 - August, 2022*
Cumulative GPA: 4.000

RESEARCH EXPERIENCE

- University of Colorado Boulder** **Undergraduate Researcher**
Advised by Rafael Frongillo, Ph. D. *May, 2023 - Present*
- Seeking to understand and capture the design spaces of liquidity provisioning and transaction fee protocols in prediction markets and decentralized exchanges.
 - Thinking about liquidity provisioning as multiple automated market makers running in parallel and resulting implications.
 - Active in the algorithmic economics reading group.
 - Assisted with reviewing papers.
 - Research interests include algorithmic economics, computational social choice theory, and complexity theory.
- Preprints
 1. Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygar. A general theory of liquidity provisioning for automated market makers. *arXiv preprint arXiv:2311.08725*, 2023
 - Talks
 1. Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygar. A general theory of liquidity provisioning for automated market makers, 2024. Workshop on Blockchains and Decentralized Finance at the 25th ACM Conference on Economics and Computation (EC'24)

TEACHING EXPERIENCE

- University of Colorado Boulder**
- CSCI 3155: Principles of Programming Languages, Spring 2025. Course Assistant.
 - CSCI 3104: Algorithms, Spring 2024. Course Assistant.
 - MATH 1300: Calculus I, Spring 2023. Learning Assistant.
- Silver Creek High School**
- Instructional Student Assistant Program Director, Fall 2021-Spring 2022.
 - College-Preparatory Physics, Spring, Fall 2021-Spring 2022. Instructional Student Assistant.
 - High School Algebra I, Fall 2020. Instructional Student Assistant.
 - High School Algebra II, Spring 2020. Instructional Student Assistant.
- Innovation Center of St. Vrain Valley Schools**
- Advanced Cybersecurity with Python Programming, Summer 2023. (Intensive 7-Hour/Day Weeklong Course). Instructor.
 - Fundamentals of Cybersecurity, Summers 2019-2022. (Intensive 7-Hour/Day Weeklong Course). Instructor.

HONORS, AWARDS, AND FUNDING

- Boettcher Scholarship (Undergraduate Merit-Based Full Ride) Awardee *April, 2022*
- Economics and Computation 2024 Travel Grant, Funded by Rafael Frongillo's NSF CAREER Award *July, 2024*
- Algorithmic Economics NSF REU Grant Recipient, Funded by Rafael Frongillo's NSF CAREER Award *May, 2023*
- Marlene Massaro Pratto and David Pratto Scholarship in Mathematics Awardee *June, 2024*
- University of Colorado Boulder Engineering Honors Student *February, 2022*
- National Merit Finalist *February, 2022*
- Colorado School of Mines Medal of Achievement in Mathematics and Science Awardee *May, 2021*

SCHOLARLY SERVICE & ADDITIONAL RESEARCH ACTIVITY

- Engineering Honors Program Admissions Executive Committee Member *University of Colorado Boulder, 2024*
- Norlin Scholarship Admissions Reviewer *University of Colorado Boulder, 2023, 2024*
- Engineering Honors Program First-Year Seminar Recitation Leader *University of Colorado Boulder, 2024*
- Semi-technical blog on topics in mathematics and theoretical computer science at
<https://officialadithya.github.io/blog/>

REFERENCES

- [1] Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygar. A general theory of liquidity provisioning for automated market makers. *arXiv preprint arXiv:2311.08725*, 2023.
- [2] Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygar. A general theory of liquidity provisioning for automated market makers, 2024. Workshop on Blockchains and Decentralized Finance at the 25th ACM Conference on Economics and Computation (EC'24).