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

Relevant Coursework: 4 Graduate Courses: Linear and Integer Programming, Algebra, Theory of Computation, Design and Analysis of Algorithms, Complexity Theory (Audit)

Front Range Community College

High School Concurrent Enrollment

Cumulative GPA: 4.000

Longmont, Colorado June, 2021 - August, 2022

Research Experience

University of Colorado Boulder

Advised by Rafael Frongillo, Ph. D.

Undergraduate Researcher

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.
- Papers
 - 1. Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygari. A general theory of liquidity provisioning for automated market makers. arXiv preprint arXiv:2311.08725, 2023
- Talks
 - 1. Adithya Bhaskara, Rafael Frongillo, and Maneesha Papireddygari. 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 3104: Algorithms, Spring 2024. Course Assistant.
- MATH 1300: Calculus I, Spring 2023. Learning Assistant.

Silver Creek High School

National Merit Finalist

- 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 $\approx $140,000 \text{ Value}$) Awardee

April, 2022

• Economics and Computation 2024 Travel Grant, Funded by Rafael Frongillo's NSF CAREER Award J

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 (\$2,500 Value) Awardee

June, 2024 February, 2022

• University of Colorado Boulder Engineering Honors Student

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/