

Advay Vyas

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Education

University of Texas at Austin

Austin, Texas

B.S. in Statistics and Data Science with double major in Mathematics, GPA: 4.0/4.0

Texas Academy of Mathematics and Science

Denton, Texas

Major: Computer Science, GPA: 4.0/4.0

Experience

Spartan Fitness Holdings

Dallas, Texas

Summer Finance Associate

Summer 2024

- Worked with the financial team at Spartan Fitness Holdings on financial data for 80 Club Pilates franchises.
- Cleaned, processed, and reported on location acquisition data, debt covenants, and loan data.

University of North Texas

Denton, Texas

Undergraduate Research Assistant

2023-2024

- Conducted traffic research with Dr. Jianguo Liu in the UNT Mathematics Department.
- Generated realistic networks based on DoT data and approximated gradient minima using Lagrange multipliers.
- Reduced traffic irregularity by 31.3% on custom traffic models and algorithms.
- **Published at the 2023 9th Annual MIT IEEE Undergraduate Research Technology Conference ([link](#)).**

University of North Texas

Denton, Texas

Undergraduate Research Assistant

2022-2024

- Conducted neuroscience research under Dr. McMahan in the UNT Learning Technologies Department.
- Developed the game with Unity and worked on the flowchart of recursive scenarios and EEG testing.
- Goal to help educators to understand individual children and tailor classroom experiences.
- **Published at the 2024 27th Annual CyberPsychology, CyberTherapy & Social Networking Conference ([link](#)).**

Activities

UT Math Club

- Engaged in a study of topological data analysis with a graduate mentor using Munkres' *Topology* and Hatcher's *Algebraic Topology* and presented [an original talk](#) at the Fall Directed Reading Program Symposium.
- Attended weekly practices for the Putnam Mathematical Competition, received a score of 3 as a freshman.

Awards and Recognitions

National Merit Finalist Scholarship

- Chosen for a \$2,500 scholarship for exemplary academic and extracurricular achievements.

BSA Eagle Scout

- Awarded the highest rank in Boy Scouts after a decade of service and leadership mentoring younger Scouts.

UT Polymathic Scholar

- Accepted into UT Austin's CNS Honors and tasked to write an interdisciplinary honors capstone thesis.

UNT Undergraduate Research Fellow

- Selected for a summer scholarship and granted stipend to continue research under Dr. McMahan and Dr. Liu.

Additional Information

Technical Skills: R, Python, C++, Java, Unity, ML Libraries, Data Cleaning, Data Visualization, Microsoft Office

Relevant Coursework: Real Analysis I, Probability, Intro to Stochastic Processes, Differential Equations, Linear Algebra

Work Eligibility: US Citizen, eligible to work in the U.S. with no restrictions