Rishabh Rengarajan

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🔗 Linkedin | ⭘ Github

Education

Rice University	Houston, TX
B.S., Computer Science	August 2025 - May 2029

Cistercian Preparatory School	Dallas, TX
Graduated class valedictorian with 4.0 unweighted GPA.	August 2017 - May 2025
2025 National Merit Finalist. 2025 U.S. Presidential Scholars Program Semifinalist.	

Stanford Pre-Collegiate University-Level Online Math and Physics - Linear Algebra (XM511)	Online
Received an A in the course.	June 2024 - August 2024

Experience

AI Safety Lab, University of Texas at Dallas — Richardson, TX
Research Intern — June 2024 - September 2024
Researched advanced machine learning techniques for autonomous driving and model safety.
- Published paper (first co-author) on use of cross-view transformers in autonomous driving.
- Designed and trained novel architecture for 3D object detection using bird's eye segmentation and CenterPoint techniques.
- Evaluated model performance with real-world and simulated datasets (CARLA, NuScenes).

AI/ML Internship, University of Texas at Dallas — Richardson, TX
Research Intern — June 2023 – August 2023
- Built autonomous pathing system combining computer vision with odometry for FRC robot navigation.
- Led workshops for peers on LSTMs and decision tree classification models.

Mathnasium — Irving, TX
Mathematics Instructor — June 2024 – December 2024
- Tutored K–12 students in math concepts ranging from basic counting to calculus.
- Created supplemental progress reports and provided real-time problem solving guidance.

Leadership & Activities

FRC 6672 "Fusion Corps" — Dallas, TX
Programming Captain, App Developer — August 2021 – May 2025
Led programming and app development for a top-performing FIRST Robotics team, specializing in autonomous navigation, control systems, and data-driven strategies.
- Designed and implemented advanced control systems with computer vision, localization, and path-following.
- 2022 World Championship Winner, 2023 Worlds Division & Innovation in Control Award Winner, 2024 Worlds Division Finalist.
- Dean's List Award Nominee.

Hack Club @ Cistercian — Irving, TX
Founder — August 2024 – May 2025
Established and led a student-run coding organization focused on promoting software development skills, peer collaboration, and open-source contributions.

Texas A&M Power Contest — College Station, TX
Team Co-Captain — October 2024
Served as team co-captain for a statewide mathematical proof-writing competition, leading technical writing and solution design efforts.
- Planned and co-wrote 10 rigorous mathematical proofs for the contest using LaTeX.
- Placed *2nd statewide*.

Skills & Interests

Technical - Java, Python, C++, JavaScript, LaTeX, …
Languages - fluent English, conversational Spanish, and a little Latin.
Other Interests - Classical piano, table tennis, fountain pens, obscure board games, chess, Ogden Nash poetry.