

Rehan Shah

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Academic Accomplishments and Standardized Test

Ahmedabad International School (AIS), Ahmedabad, India - Advanced Subsidiary Levels Received highest possible score of 4 A's in Math Economics Physics Further Math	2022 – Present
Ahmedabad International School (AIS), Ahmedabad, India - IGCSE Attained a 94% average across 7 subjects, including 2 languages, mathematics, 3 sciences, and 2 commerce subjects Ranked 1st in IGCSE Economics, Additional Math, and Further Math; consequently in the top 10% of the class across all subjects	2019 – 2022
SAT : 1560 (Math: 790, Reading & Writing: 770)	Oct 2023
AP Computer Science A : 5/5	May 2022

Honors and awards

Notable Awards and Achievements in Science, Technology, and Innovation

3rd National and 27th Global Ranking, AAPT Physics Bowl (10,000 participants)	March 2024
Runners up in Indian and Regional Space Settlement Design Competitions	Sept 2023 - Jan 2024
Silicon Valley Challenge (SST) - 2nd Prize Winner out of 180,000+ Participants Developed an innovative solution to challenge Google's advertising monopoly and reduce AI GPU costs for Silicon Valley Challenge from Scaler School of technology. The project presentation garnered 14,000+ YouTube views and received commendation from Subhash Chaudhry, CTO of a \$71M tech company.	Dec 2023
Junior Academy Challenge Winner from The New York Academy of Sciences Our team's innovative asteroid mining strategy, praised by NASA scientists, won an elite competition with 300 teams. Was selected from ~10,000 students to take part	Sept 2023 - Jan 2024
Received Microsoft Future Founder Scholarship for analysing Khosla Ventures Portfolio	Jun 2024
United First and United Nations honorary certification for work in Scavenger Relief	2023 - 2024
Junior Breakthrough Challenge (Results pending)	Jun 2024
Queen Marry Essay Competition (Results pending)	March 2024
CREST Gold Award (British Science Association)	2023 - 2024

Industry renowned Certifications

Multiple NSE Academy Certifications in Financial Markets (NCFM) Earned prestigious certifications from the National Stock Exchange of India, demonstrating expertise in Financial Markets and Mutual Funds	2023 - 2024
Tableau Desktop Specialist Certification	Aug 2023
Microsoft Office Specialist: Excel Associate	Sept 2023

Research Publications for Rural Development and Welfare

Springer-Published Research: Big Data & ML for Groundwater Quality assessment Authored a comprehensive review on big data and machine learning for groundwater quality assessment to improve rural access to clean water, under the guidance of Dr. Manan Shah (200+ papers, 8000+ citations on Google Scholar).	2022 - 2024
Usage of Blockchain Technology in Welfare Schemes for Developing Countries Authored a comprehensive research paper under the guidance of Dr. Manan Shah, analyzing over 60 sources to explore blockchain technology's potential to enhance transparency and efficiaccency of welfare schemes in developing countries, aiming to reduce wealth disparity.	2023 - Present

Open Source Contributions and Robotics Projects

Played integral part of CubeSat Project Development Played a key role in the development of the U1 CubeSat for geolocation tracking. A project funded by our School, involving over 20 members, is a large-scale endeavor to build a functional satellite.	Jun 2024 - Present
Made MLX WEB UI : A toolkit for using AI models Build an OSS project with 3000 plus download and +100 star which provide a toolkit to run AI Models locally faster	2023 - 2024
Contribution to Chroma DB (13.4k+ github stars) Implemented a solution in Chroma DB (10,000 line code base used by 10k+ developers) improving the speed of database by 30% with lower power consumption	Jan 2024 - Aug 2024

Created a education Resource for SAT preparation2023

Developed [Sentence Completion](#), an open-source web application widely utilized by approximate 100 high school students across the globe

Internships

- Software Engineering Internshp, Tridhya Tech LimitedApril 2024
- Help to engineered a high-performance CI/CD pipeline, slashing deployment times and enhancing developer productivity for a team of 100+ at an \$8M-valued IT firm.
- Backend Optimization Internship, GoMechanicMay 2024
- Was one of Leds of migration from Python to Golang, boosting backend efficiency by 3x and reducing operational costs by 1.5x for a leading automotive service marketplace.
- Scaler Internship Challenge Selected out of 20,000 applicants2024
- A intensive tech internship, mastering advanced web development techniques and entrepreneurial strategies.

Leadership in STEM and Academic Initiatives

- VP of Structures,Nationals & Head of Structures,Regional Space Settlement DesignSept 2023 - Jan 2024
- Lead Mentor of National Space Settlement Design Competition for my juniorsSept 2024
- Head of Software department for CubeSat Project,collaborated with 20+ membersJun 2024 - Present
- President of School’s Mathematics ClubJun 2023 - Present
- Expanded member from 10 to 60 students, spearheading preparation programs for AMC 12 and 10, significantly elevating the school’s competitive mathematics profile.
- Led a think tank which focused on slum developmentJul 2024 - Aug 2024
- Led 30 high school and college students in developing solutions for slum redevelopment and water equality. Awarded the Distinguished Delegate Award for these efforts.

Rural Development and Social Impact Initiatives

- Co-founder, Scavenger Relief, United Nations and United FirstJune 2022 - Feb 2023
- I personally led a drive to raise nearly USD 20,000 in two days, including USD 2,500 of my own, to provide kits to manual scavengers for skin disease protection. I also assisted a friend in raising awareness about using sanitary pads and providing them in rural India.
- Engineered AI Solutions for Rural EducationAug 2022 to Aug 2023
- Developed AI tools for [T.I.D.E Foundation](#), including an automated lesson planner and a personalized learning path generator, saving 60+ hours of manual work monthly and improving 200+ teachers’ quality of life. T.I.D.E has impacted 32,500+ lives across India through education.
- Developed Slum Redevelopment PlanJul 2024 - Aug 2024
- Helped to create comprehensive plan to enhance living conditions and economic growth in slum areas. Received accolades from [T.I.D.E Foundation](#); in talks with local municipality for implementation.
- Led Community Service Initiatives impacting 500+ lives2022 - Present
- Contributed 200+ hours to projects impacting 500+ people in Gujarat. Initiatives included [UV protection](#) for city cleaners, biohazard bins distribution, and sanitary pad provision for rural women. Done in association with will to live foundation and sajan shah.

Educational Outreach and Program Development

- Atam Vikas - Taught 100+ Students Math and ScienceOct 2023 - July 2024
- As a dedicated educator, instructed over 100 underprivileged students from grades 3 to 5 in math and science. Successfully improved grades and conceptual understanding, empowering academic excellence.
- Shreyas School - Developed Cyclical Math Education ProgramAug 2024 - Present
- Created an innovative, sustainable math program for underprivileged students, featuring repeatable learning cycles, reusable resources and peer-led review sessions. Significantly increased student engagement and improved test scores by 25% over 6 months.

Recognizable certifications from reputed institutions

- CS50: Introduction to Computer Science by Harvard University | ~160hrs
- Data Analysis and Visualization with Power BI by Microsoft | ~20hrs
- Innovation Through Design: Think, Make, Break, Repeat by The University of Sydney | ~15hrs
- Financial Markets by Yale University (With Honor) | ~30hrs
- Share Data Through the Art of Visualization by Google | ~25hrs