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EDUCATION

The Shri Ram School, Moulsari, Gurgaon, India;   2019 – Present
- *International Baccalaureate Diploma Program, Grade 12*   2024 – Present
- *Cambridge IGCSE Board Examinations, Grade 10*   2022 – 2024

STANDARDIZED TESTS
- **ACT Composite Score: 35 (M: 35, E: 36, S: 36, R: 32)**   2025
- **IELTS: 8 (S: 8.5, L: 8.5, R: 9, W: 6.5)**   2025

ACADEMIC HONORS & AWARDS
School
- Scholar Of The Year Award for Grade 11   2025
- 1st out of 55 students in Grade 11 and Grade 12 with an achieved IB Score of 42/42   2025
- School topper in IGCSE Board Examinations with 9A*   2024
- Topped the school in Economics, First Language English, Chemistry and Physics in IGCSE Board Examinations   2024
- Received the TSRS 'Innovator of the Year' award consecutively in Grades 9, 10 and 11   2022-2025

International
- Awarded Certificate of Distinction in the Annual Sir Isaac Newton Exam conducted by the University of Waterloo   2024
- Awarded Certificate of Distinction and Ranked 1st in the city in the Avogadro Chemistry Quiz conducted by the University of Waterloo
                                                                                                                                                                    2025
- CREST Gold Award for Trevive and Bio-inspired Industrial Vibration Damper   2024-2025
- IRIS National Fair Finalist for Bio-inspired Industrial Vibration Damper   2025
- National winner with a scholarship in the 3rd Edition of the Vivo Ignite Technology and Innovation Initiative for Trevive   2025
- Secured a government grant under the Innovation in Science Pursuit for Inspired Research Scheme(INSPIRE) of the Million Minds Augmenting National Aspiration and Knowledge(MANAK) National Awards   2021
- Bausch & Lomb Honorary Science Award & Scholarship from the University of Rochester   2025
- Citizen Scholar Award by the University of Vermont   2025

INNOVATION & PATENT
Trevive: Tree Health Monitoring Sensor Device   2024-2025
- Uses IoT sensors which detect simple environmental factors such as soil pH, electrical conductivity, NPK concentrations, soil moisture, humidity and temperature to provide accurate data on tree and plant health count
- Has an app where the environmental factor values are input, giving the users a call to action in case the plant/tree is not within adequate parameters
- Targets an essential need in the field of environmental conservation and agricultural sustainability
- Secured a Design Patent and three copyrights from the Government of India
- Monitored over 2200 trees, 33% of trees experienced severe moisture deficiency (< 15%), 38% were waterlogged and at risk of root rot,12% faced low-temperature stress, and 3.6% endured heat stress exceeding 40°C. 60% of trees exposed to high humidity are prone to fungal infections. The system triggered early warnings that enabled local caretakers to save 740 trees from dehydration, estimated to have prevented the release of over 12 tons of CO_2.

CLEAN ENERGY & SUSTAINABILITY
Research
Cost effectiveness and energy saving comparison between active and passive energy efficiency improvements in buildings with different external climates   2025
- The research paper aims to analys the effectiveness of two types of energy efficiency improvements in different external temperatures and what the price per energy saved looks like after an extended period.
- Two different ways to optimize houses and buildings to be energy efficient are through active energy efficiency and passive energy efficiency
- Active energy efficiency – smart houses centered around smart technology
- Passive energy efficiency – Passivhaus – utilizes specific design and structural components of a building such as orientation, insulation, and material of windows, to reduce energy consumption throughout the year

Enrichment Initiative
Environment Energy Sustainability(EES) Learning Module System   2024
- Learning Module System (LMS) to educate middle school students on climate change, sustainability, and energy crise
- Developed structured academic content, quizzes and certifications, making it accessible to schools across India
- Scaled to multiple Government Schools (children from economically weaker families) in Delhi.
- The LMS is live on Android and under Apple for Review
- Has reached 1000+ student registrations and downloads

Local Outreach
Creek Restoration Project - IAmGurgaon   2025
- The Aravali Creeks are more than just water channels; they are critical components of Gurgaon's ecological and social fabric
- Their restoration represents a holistic approach to urban sustainability, addressing challenges of flooding and water scarcity while simultaneously enhancing biodiversity and improving the quality of life for residents
- Conducted primary research on the creek by observing and monitoring it

- Formed reports which detailed the environmental and social impact the creek restoration would have/had, allowing the organization to envision the restoration's impact with greater precision

Internship
ReNew Global   2024
- Worked with India's leading decarbonization solutions company focused on clean energy, large-scale wind & solar projects, green hydrogen production, energy storage and carbon market solutions
- Led a GHG Emissions Research Project, investigating emission categories and sources across ReNew's value chain, and compliance with ISO 14064(Parts 1 & 3) for GHG emission quantification
- Reporting, verification, GHG boundaries, assurance processes and verification methodologies for sustainability compliance

Courses & Workshops
Sustainable Energy Engineering Innovation Academic Program (3-Credit course) at the Johns Hopkins University Campus, USA   2024
- Completed a 4-week residential program at the Johns Hopkins University Homewood Campus in Baltimore (F-1 visa requisite)
- Earned 97.18%(a+), the highest achievable grade.
- Explored methods to reduce energy consumption and studied the science and engineering behind energy production and distribution

Exploring Renewable Energy Schemes by the University of Pennsylvania   2023
Introduction to Environmental Science by Dartmouth   2024
Career Progression Course by Stanford   2022
Inspirit AI, AI Scholars Program   2024

SCHOOL LEADERSHIP
House captain, Senior Student Council   2024-2025
- Elected for 2 consecutive years from a competitive pool of 300 students throughout the entire school
- Organised inter-house competitions, mentored juniors, and fostered unity through regular house meetings and team-building activities
- Initiated a peer mentorship program, resulting in improved academic performance and increased student engagement in house activities

Basketball   2021-Present
- Captained U-19 ISSO team at SGFI Finals (Patiala, 2024)
- Consistently represented the school in ISSO U-14, U-17, and U-19 categories since Grade 8 and contributed to the 2nd runners-up at ISSO Basketball National Championship (Hyderabad, 2024)

TECHNOLOGY PURSUITS
Investigating Kangaroo Legs as a Bioinspired Vibration Damper for Heavy Load Vibrational Machines   2024-2025
- This research paper draws design principles from kangaroo leg structures by utilizing Finite Element Analysis (FEA) to stimulate and test multiple damper orientations
- Demonstrates the potential for more efficient industrial vibration reduction
- Accepted for Publication in the International Conference on Futuristic Advances in Mechanical Engineering for Aerospace & Defense (ICFAMEAD) journal – Expected within 6-8 months

Maker Portfolio   2024-2025
- Created a **self-balancing robot** designed to stay upright, using sensors and precise control algorithms to maintain balance
- Create a **smart soil sensor** that measures soil pH, electrical conductivity, moisture and temperature
- Created a **six-legged robot** (Hexapod) that walks and navigates terrains and obstacles

20th Annual Asian Regional Space Settlement Design Competition (SSDC), Dubai (International)   2024
- Proposed a cycler orbit space settlement for transportation between Earth and Mars, integrating construction, operations, and resource planning.
7th Annual Indian National Space Settlement Design Competition (SSDC), (National)   2025
- First Runner-Up among 35 teams in India for designing a lunar mining base (2059) with structural planning, automation, human factors, and business development.

COMMUNITY SERVICE
Shri Abhyas Program, The Shri Ram School – Volunteer   2023
- Mentored 10-15 first-generation learners from economically weaker sections, providing structured after-school support in mathematics and science.
- Created engaging quizzes on Kahoot to enhance the learning experience, fostering a collaborative environment that promoted academic growth.
SRF Vidyalaya School – Mentor   2022
- Conducted online music and storytelling sessions during the COVID-19 pandemic, helping maintain student motivation and engagement for underprivileged children across the school.
- Led the development of social media content to enhance the school's online presence, supporting its outreach efforts during challenging times.

SKILLS AND INTERESTS   2021-Present
- Familiar with C++ and Java
- Achieved Guitar Grade 4 in the Rockschool examinations while showcasing musical talent through performances at local music school concerts, interschool festivals, and public events, while progressing through Rockschool certifications