

ARNAV SHAH

703 Arunodaya Apartments, Juhu Lane, Opposite New Insurance Colony, Andheri West, Mumbai(400058)

EDUCATION

Jamnabai Narsee International School , Mumbai, India;	2025-2027
-International Baccalaureate Diploma Programme,Grade 12	2026-2027
SVKM J.V. Parekh International School , Mumbai, India;	2012-2025
- Cambridge IGCSE Board Examination, Grade 10	2024-2025

STANDARDISED TESTS

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| • SAT: 1490(Mathematics:790, Reading and Writing: 700) | 2024-2025 |
| • TOEFL: 5.5(Reading: 6, Listening: 6, Writing: 5.5, Speaking: 5) | 2024-2025 |

HONOURS AND AWARDS

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| • Crest Gold Award for Deep Learning Based Tetanus Wound Risk Detection System | 2025 |
| • Indian National Science And Engineering Fair Silver Award for Deep Learning Based Tetanus Wound Risk Detection System | 2025 |
| • International Greenwich Olympiad Silver Award for Deep Learning Based Tetanus Wound Risk Detection System | 2025 |
| • Selected for the second round of ST Yau and Vivo Ignite for Deep Learning Based Tetanus Wound Risk Detection System | 2026 |
| • NSRI GRC semi-finalist top 100 for Research Paper on Deep Learning Based Tetanus Wound Risk Detection System | 2026 |
| • 1 st Place in School Pi Day Mathematics Competition | 2026 |
| • Core topper in Mathematics in IGCSE | 2025 |
| • Selected for the prestigious London International Youth Science Federation summer camp | 2026 |

ENGINEERING EXPERIENCE AND RESEARCH

Research and Outreach

Deep Learning Based Tetanus Wound Risk Detection System:	2024-2025
- Built an AI system that classifies tetanus wound risk as low, medium, or high. - Achieved 95.42% accuracy using EfficientNetB0 and transfer learning. - Improved performance through image preprocessing and augmentation. - Deployed real-time edge inference through Streamlit on a Raspberry Pi 5. - Scaled the farm-and-port device into a mobile application for high-risk environments.	
Drone Based Worker Emergency System:	2026
- Used ground sensors to detect smoke or fire and transmit its GPS location. - Deployed an autonomous drone for live footage and faster emergency response.	
IoT Container Telemetry System:	2026
- Monitored container location, door status, shock/tilt, temperature, and humidity. - Detected tampering, route deviations, impacts, and anomalies with automated alerts.	

Internships:

NWD Co(a software consultancy firm specialising in hospitality & enterprise tech): Artificial Intelligence/Machine Learning **2026**
SharpITech Logistics(A firm that develops technical solutions for shipping and logistics): Built an IoT device for tracking containers and other factors **2023**
Crest Data Systems(Builds custom integrations and solutions in data analytics, cybersecurity, DevOps and cloud for platforms like Splunk and ServiceNow): Developed a Cloud-Based IoT Device Management Platform using ESP32, environmental sensors, backend APIs, and a live dashboard for real-time device monitoring and telemetry management. **2025**

Online Courses And Certificates:

IBM Data Science Professional Course
Programmable Logic Control course on Coursera
Six Sigma course on Coursera

LEADERSHIP:

Deputy Public Relations Officer in Grade 9: **2023-2024**

- Supported the planning, promotion, and communication of school events and student-led initiatives.
- Coordinated outreach, publicity, and promotional content to improve participation and engagement.

Head Of Technology in International Youth Conference 2026: **2026**

- Supported technology-driven initiatives, events, and digital operations.
- Coordinated technical requirements and troubleshoot issues during the conference.

Tech Conference at St Josephs Convent High School: **2026**

- Conducted a technology conference on artificial intelligence and emerging technologies.
- Used practical examples and demonstrations to explain real-world applications to students.

IBDP EXTENDED ESSAY IN PHYSICS:

Research Question: How does the angle of incidence affect the degree of polarization of light reflected from a glass surface, and how accurately can Brewster's angle determine the refractive index of the glass?

- Explored why polarised sunglasses reduce reflections from glass and wet roads.
- Investigated how reflected-light polarisation changes with the angle of incidence.
- Measured reflected laser intensity in both polarisation directions to locate Brewster's angle.
- Used Brewster's angle to calculate the glass refractive index and assess the method's accuracy.

EXTRACURRICULARS:

- Grand Cultural for Drama **2026**
- International Youth Conference Participation **2023 and 2025**
- Tech Head in school Annual Day for Grade 9 and 10

2023-2025

SKILLS:

- Python, C++ and SQL
