

# **Sahaj Patel**

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## **EDUCATION**

<b>Navrachana International School</b> , Vadodara, India; <i>International Baccalaureate Programme, Grade 12;</i>	2011-Present
<b>Navrachana International School</b> , Vadodara, India; <i>Cambridge IGCSE board examination, Grade 10;</i>	2024-2026
	2022-2024

## **STANDARDIZED TESTS**

- **SAT: Total - 1540; Math: 790; Reading & Writing: 750** 2025
- **IELTS: Overall Band: 8; Listening: 8.5; Reading: 9; Writing: 7; Speaking: 7.5** 2025

## **ACADEMIC HONOURS AND AWARDS**

### ***School:***

- Ranked **1st in Physics, Chemistry, Mathematics AA HL, and Economics** in Grade 11. 2024-2025
- Awarded the **ICE Distinction** for achieving **7 A\*** in the IGCSE Board Examination. 2024
- **Topped the school in Mathematics** in the IGCSE board examination (Rank 1 out of 54 students). 2024
- Consistently **stood first in Additional Mathematics** throughout Grades 9 and 10, earning a near-perfect score of **159/160** each term. 2023- 2024

### ***International:***

- Recipient of the **British Gold Crest Award** for innovation in the **electric-vehicle sector**, recognizing excellence in applied science and design. 2025
- **HKIMO Gold Medalist** for exceptional analytical and problem-solving skills. 2025
- Achieved **Distinction in the Hypatia and SIN Olympiads**, placing among the top global candidates. 2025
- Named an **International Youth Math Challenge Finalist**, representing India in global mathematical competitions. 2025

## **SCIENCE AND VOCATIONAL SKILLS DEVELOPMENT**

### **Baroda Science Society — Founder & President**

*Founded and led a youth-driven initiative promoting **STEM education among government-school students** across Gujarat.*

- *Conducted hands-on science workshops for 500+ students, introducing them to practical experiments and real-world applications.*
- *Successfully increased the percentage of students opting for **STEM fields** in secondary education.*
- *Secured corporate sponsorships through CSR initiatives amounting to ₹12,40,000 to establish science labs in rural schools.*

## **STEM, INNOVATION, & RESEARCH EXPERIENCE**

### ***Innovation — Technology International Pvt. Ltd.(85H8+QCH, 404, Synergy Square, Krishna Industrial Estate, 390016, BIDC Gorwa Estate, Gorwa, Vadodara, Gujarat 390003)***

Interned for over a year at a leading mechanical-engineering firm.

- Contributed to the **design, prototyping, and market launch of four commercial products**, including sustainable solutions in the EV sector.
- Supported **engineering calculations, material selection, and process optimization** to solve long-standing industry challenges. 2024-2025

### ***Research — Maharaja Sayajirao University of Baroda***

Collaborated with the **Head of Engineering** and senior researchers to **improve aircraft efficiency** through **aerodynamic testing and calculus-based modeling**.

- Explored optimization models for **lift-to-drag ratios** and **energy efficiency** in light-weight aircraft structures. 2025

### ***Publication:***

**Research - INOXCVA (Inox India Limited, GJ SH 175, near Boru, Kalol, Gujarat 389330)**

*Collaborated with this global firm to research and build dish ends for pressure vessels, tanks, and pipelines.*

2025

**Enrichment Programs:**

- Selected for the **Young Tech Scholars Program**, where I **designed and built a hand-propelled car** using advanced coding and mechanical systems. 2024
- Completed online certifications:
  - *Fundamental Skills in Engineering Design* – University of Leeds
  - *Python for Beginners* – University of Michigan
  - *Linear Algebra* – Johns Hopkins University

## **SCHOOL LEADERSHIP**

- **Head Boy:** *Elected to lead a student body of 1,500+ students, overseeing school-wide initiatives, events, and leadership programs.* 2024-2025
- **Chair – UNHRC (NIMUN XV) | Core Team Member – NIMUN XV | Co-Chair – NIMUN XIV | Best Delegate – NIMUN XIII.** 2023-2025
  - *Led delegate training sessions and moderated inter-school debate conferences, promoting diplomacy and critical reasoning.*

## **BASKETBALL ACHIEVEMENTS**

- **Top 75 in India** – Selected for the **U17 Indian National Team Selection Camp.** 2023
- **Captain – Gujarat U17 National Team**, leading the squad through multiple championships. 2024
- Represented **Gujarat U17 and U19** at **National and SGFI Tournaments.** 2024
- Selected for the **ISSO Nationals Team.** 2020
- Awarded **Best Defender – ISSO U14.** 2020
- Competed in **8+ state-level tournaments**, representing Vadodara 2020-2025

## **MUN & DEBATE**

**Chair – UNHRC (NIMUN XV), Co-Chair – NIMUN XIV, Best Delegate – NIMUN XIII.**

- Experienced in **policy negotiation, conflict resolution, and international diplomacy.**
- Regular participant in **open debates and cross-disciplinary discussions** on geopolitics and ethics. 2023-2025

## **COMMUNITY SERVICE**

**Founder – DonateMeds**

- Created a **sustainable medicine-donation platform** that collects unused medicines from households and redistributes them to **government hospitals.**
- **Over 500 medicines donated**, directly improving healthcare access for underprivileged communities. 2023-2025

**Interact Club (Rotary International)**

- **Treasurer (2023–24) | Joint Secretary (2024–25).**
- Organized **fundraisers, health drives, and community outreach programs** impacting local families.

## **SKILLS**

**Programming:** Basic proficiency in **Python** and **Java**.

**Technical:** Engineering Design, Data Analysis, Process Optimization, and Scientific Writing.

**Soft Skills:** Leadership, Collaboration, Public Speaking, Strategic Thinking.

## **INTERESTS**

**Sports:** Basketball (U17 & U19 Nationals), Pickleball, Cricket

**Academics:** Mathematics, Physics, Applied Engineering

**Public Speaking:** Model UN, Debate, Leadership Panels