

Amairah Anand

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EDUCATION

- **Sanskriti School, New Delhi** | 2012–2026
 - Grade 12: 99.2% (predicted) – Physics, Chemistry, Mathematics, Economics, English
 - Grade 11: 88.4% – Physics, Chemistry, Mathematics, Economics, English
(*Top 10% of class*)
 - Grade 10: 95.8% overall, 97.4% best of five; *Daksh Puruskar* for 100 in Spanish.
(*Academic Excellence Award*)
- **Research Science Institute – India (RSI-India)** | 2025
 - Selected as 1 of ~35 high school students nationwide. Conducted an independent molecular biology project on a tRNA-recognizing riboswitch, exploring RNA-ligand interactions, developed a deeper interest in RNA biology and transcription regulation.
 - Presented findings to peers and mentors, Best 10 research presentations award
- **UMass Amherst – Program for Aspiring Scientists** | 2024
 - Awarded 20% merit scholarship.
 - Developed Python-based simulations for projectile motion, planetary orbits, and quantum systems.
- **Girls Who Code Summer Program** | 2024
 - Built interactive games using P5.js and JavaScript, integrating UX design principles.
- **New York Maths Circles** | 2024
 - 80% scholarship; studied Graph Theory, Number Theory, and Combinatorics.
- **World Science Scholars – World Science Festival, USA** | 2024–Present
 - Selected as 1 of only 52 students globally; mentored by Nobel Laureates and leading scientists such as Dr. Brian Greene, Dr. Cumrun Vafa
- **The Junior Academy – New York Academy of Sciences** | 2024–Present
 - Team Lead for urban water innovation and waste management projects.

TECHNICAL SKILLS

- **Programming & Tools:** Python, C++, JavaScript, Arduino IDE, P5.js, Pandas, Matplotlib, LaTeX
- **Data Analysis & Visualization:** Python (Pandas, Matplotlib), real-time dashboards.

- **Languages:** English (Native), Hindi (Native), Spanish (B2 Proficiency)

WORK & RESEARCH EXPERIENCE

Founder & Innovator – Project SAFI (Sustainable Aquatic Floating Islands) | 2023–Present

- Led a 16-month lake restoration at Prasad Nagar Lake, benefiting 89,418 residents.
- Designed floating rafts from bamboo, coir, recycled bottles, and native plants, reducing nitrates by 34% and phosphates by 21%.
- Partnered with the Indian Council of Agricultural Research and the Delhi Development Authority to scale the project
- Featured in *Hindustan Times*; awarded 3rd Prize – KIIT Ideathon winning Rs. 20,000; Panelist at *Times of India – Voices of Change, Youth Impact Summit*.

Founder and Developer – Kaccha Pakka Pottery | 2023–Present

- Founded a **rural innovation initiative** in **Kot Jewar, Jaipur**, to revive and modernize the fading art of blue pottery while improving the livelihoods of local artisans.
- Led two highly successful fundraisers, each raising **over ₹50,000** within two days, equivalent to two months of income for many artisans.
- Addressed the important challenges they face such as:
 - **Lack of advertisement and market reach** – built awareness campaigns and partnered with local schools and craft collectives to promote handmade blue pottery.
 - **Excessive clay waste** – developed a circular reuse model by repurposing broken blue pottery into sustainable 3D puzzles for children, blending cultural heritage with child-centered design.
- Currently working on **partnering with the Rajasthan government** to secure funding and **reopen disused craft villages**

Engineer and Developer – IoT Water Quality Monitoring System | 2024–Present

- Developed an ESP32 + GSM-based device measuring pH, turbidity, TDS, nitrates, and phosphates—cost under ₹1000.
- Integrated real-time alerts via SMS, dashboards, and Telegram bots; deployed across SAFI sites.

Founder and Developer – Project GUARDIAN SOS | 2024–Present

- Created a GSM + GPS wearable safety device with dual panic modes and SMS-based remote control.
- 2nd Place at Think Tank India, Shark Tank Inspired Competition among 50+ teams.

HONOURS & AWARDS

- **KIIT Ideathon 2025** – National Award, Project SAFI (3rd Prize) with Rs. 20,000 Grant.
- **DPS R.K. Puram Physics Competition 2024** – 1st Prize, Sustainability.
- **Think Tank Science Fair 2023** – 2nd Prize, GUARDIAN SOS wearable.
- **Katha Utsav Finale 2022** – Young Reader Leader & Young Writers' Award.
- **Academic Excellence Award** – 2019–Present.
