

NEIL ARORA



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SKILLS

Web Development

- HTML / CSS
- Cloudflare

Low Level Programming and Embedded

Technologies

- Holy C / C
- Objective C

Game Development

- C# with Unity
- GDscript with Godot
- Blueprints with Unreal Engine

Robotics and Electronics

- ATMEGA chipsets
- Raspberry Pi
- ESP microprocessors
- PCB designing and Manufacturing

CAD and CAM

- Fusion 360
- G-CODE generation (Slicer Manipulation)
- 3D printing and CNC
- Fluid Simulations

Database Management

- MySQL
- Supabase

Computer Vision

- Python
- OpenCV

Soft Skills and Interests

- Leadership and Mentorship
- Saxophone
- Golf
- Event Management and Hosting
- Research Skills
- Server Management

EXPERIENCE

PARIKSHA PE CHARCHA

JANUARY 2024

PRESENTER AND DEVELOPER

One of 11 students selected from CBSE schools nationwide to showcase my project to **Hon'ble Prime Minister Narendra Modi**.

The technologies used include ATMEGA 328P, Objective C, CAD/CAM, Manufacturing and Virtual Testing on Fusion 360.

CBSE SCIENCE EXHIBITION

DECEMBER 2023

CO-LEADER AND ENGINEER

We were the **winners** of the Transport and Communication Category at Regional Level.

The technologies used include ATMEGA 328P, Objective C, CAD/CAM, Manufacturing and Virtual Testing on Fusion 360.

F1 IN SCHOOLS

2022-2023

TEAM MANAGER, CAR DESIGNER AND MANUFACTURING ENGINEER

We were the **winners** at Regional Level.

We qualified for Nationals where we won **Fastest Reaction Time** Award and were **one of top 14 teams**.

The technologies used include CAD/CAM, Manufacturing, Virtual Testing on Fusion 360, Fluid Simulation and Material Science.

WORLD ROBOTICS CHAMPIONSHIP 2019, 2022 & 2024

LEADER, DEVELOPER AND ENGINEER

We were selected for **international level** in 2024 and 2022.

We were selected for **international level** in 2019 and were the **world finalist**.

The technologies used include ATMEGA 328P, Objective C, CAD/CAM, Manufacturing and Proportional-integral-derivative controller.

INTEL ARTIFICIAL INTELLIGENCE

MAY 2022

STUDENT AND DEVELOPER

I was selected by **Intel** to create a Emotion Detection Software.

The technologies used include Python and OpenCV.

SCHOLARSHIPS

ISS INTERNATIONAL SCHOOL
MERIT SCHOLARSHIP

JAN 2025

I was awarded a **merit based scholarship** of **80%** to attend **ISS International School, Singapore**.

DS RESIDENCES
MERIT SCHOLARSHIP

JAN 2025

I was awarded a **merit based scholarship** of **100%** by my hostel - **DS Residences, Singapore**.

INTERNSHIPS

COMPACT INFRA (ADITYA BIRLA GROUP) MAY 2024
SOFTWARE DEVELOPMENT

I was assigned and successfully completed my task of building an **offline truck and goods management software** for **Compact Infra**, contractor of the prestigious **Aditya Birla Group**.

The technologies used include **Python, Pickle Database, File Management** via Pickle and **Bill/Challan generation** by Python.

UNITED NATIONS (UNGSII) JUNE 2024
SUSTAINABILITY AND SDG

I was assigned and successfully completed my task of learning and understanding about different **Sustainable Development Goals**. I also conducted a **global survey** to get to know how different **citizens infer the Sustainable Development Goals**.

WORK EXPERIENCE

BERN TECHNOLOGIES JULY 2025
LEAD HARDWARE AND FIRMWARE ENGINEER

I am the **youngest lead engineer** working on the development of proprietary hardware and firmware at a student-founded startup (**BITS, Duke University, Cornell**). Responsible for **end-to-end design, implementation, and optimisation of embedded systems**.

JUNE SEPT 2025
CO-FOUNDER AND LEAD HARDWARE AND FIRMWARE ENGINEER

I am the **co-founder** and the **youngest member** of the **core development team**, contributing to **proprietary hardware and firmware** projects. I handle the complete process of **designing, implementing, and optimizing embedded systems**.

INDEPENDENT PROJECTS

GENERICCUBE STUDIOS
CO-FOUNDER AND PROGRAMMER

APRIL 2025

I am the **co-founder and lead programmer** at **GenericCube Studios**, an **independent game development studio** focused on creating **immersive horror experiences**.

MEDIA COVERAGE

DD NATIONAL

FEBRUARY 2024

I was interviewed by **Mrs. Kriti Wadhera** on **DD National** regarding the development of one of my projects, following my selection to present the idea to Prime Minister Narendra Modi.

The interview can be accessed [here](#).

PUBLIC IMPACT INITIATIVES

TALKMED RELAY FOR LIFE
PARTICIPANT

MARCH 2025

Participated in **Singapore Cancer Society-TalkMed Relay For Life**, an overnight event to raise awareness about cancer patients.

NET IMPACT DELHI UNIVERSITY
RESEARCH AND CONTENT CREATION

APRIL 2025

Selected as one of the **youngest and high-school members** among a cohort of **college students** to be a part of the **research and content** department of **Net Impact's Delhi University chapter**.

Net Impact is an **international nonprofit organization** for college students and professionals interested in using **business skills** in support of various **social and environmental causes**.

PUBLICATIONS

INDUSTRY REPORT - EV
RESEARCHER AND AUTHOR

APRIL - JUNE 2025

Researched and wrote an **industry report** highlighting information regarding the **electric vehicle industry**.

The report was published in collaboration with **Net Impact - Delhi University** and can be accessed via their **LinkedIn page** [here](#) or **website** [here](#).

ARTICLE ON SOFT DIPLOMACY

JUNE 2025

RESEARCHER AND AUTHOR

Researched and wrote an article for **Net Impact - Delhi University** about **yoga** as a tool of **soft diplomacy** for **India**.

This article was written in light of **global yoga day** and can be accessed via **LinkedIn [here](#)** or **website [here](#)**.

AWARDS

DR. APJ ABDUL KALAM IGNITED MIND 2024

SEPT 2025

WINNER AND RECIPIENT

Honoured with the **Dr. A.P.J. Abdul Kalam Ignited Mind Children Creativity and Innovation Award**, a **national recognition** for **student innovation**, for my project on an **AI-driven first responder** for **healthcare**.

OTHER EXPERIENCES

PROGRAMMING CERTIFICATIONS

- Certified with highest grade in **HTML** and **CSS**.

CODATHONS

- Participated in **Google Code-A-Thon**.
- Participated in **Apple's Swift Playground Challenge**.

OTHER ACHIEVEMENTS

ACADEMICS

- All India Secondary School Examination - **96.6%** aggregate.
- **Scholar Badge Holder** in Grades **VI** and **IX** (LVISN).
- A **Top 20** student in Grade **X**, Awarded with **Scholar Badge** and **cash reward** (LVISN).
- Eligible for **Scholar Badge** in Grades **VIII** and **VII** (LVISN).
- **Honour Roll** recipient for Grade **XI** and **top 5** student (ISS).

STUDENT COUNCIL

- Was given the responsibility of **Vice IT Captain** in LVISN.
- Was given the responsibility of **House Captain Nalanda** in LVISN.

ONLINE LEARNING COMMUNITY

- Was given the responsibility of **Vice President** of the **STEM OLC** in LVISN .

NATIONAL YOUTH AWARD

- Received personal recommendation by **Dr. Ruchi Seth** (Director-Principal, Lotus Valley International School, Noida) for **National Youth Award** by **Government of India**.

MISCELLANEOUS

- **1st Prize** in **ATL Tinkerfest 2024** - **Seth Aandram Jaipuria**.
- Participated in the **Innovation To Elevate** competition hosted by the **Government of Uttar Pradesh & NASA**.
- Participated in **ALO** hosted by **IIT Delhi**.
- Participated in **Reverberations 2019** hosted by **Bal Bharti Public School**.
- Certified in **Quantum Computing** from **IIT Delhi**.
- Received **testimonial** for helping at **Sports Day** at **ISS, Singapore**.
- Winner of **Knowledgeable** learner profile award in **G-11** at **ISS, Singapore**.

SOFT SKILLS

SAXOPHONE

- **Only** Saxophone player in **LVISN**.
- Selected for **solo** and **lead** in school's band.

SPORTS

- **Bronze Medal** in Golf tournament.
- **Certificate of Excellence** in Soccer by Soccer Foundation, India.