

SARTHAK AHUJA

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EDUCATION

Pathways School Gurgaon, India

2015 - Present

Grades 11 & 12 IB DP, Grades 6-10 IB MYP

Relevant Coursework: HL Math Analysis and Approaches, HL Physics, HL Economics, SL Chemistry, SL French B, SL Language and Literature

Grade 9- 52/56

Grade 10- 53/56

Grade 11- 38/42

Grade 12 Semester 1 - 40/42

Online Courses

Completed **Harvard University's** CS50 *Introduction to Computer Science*

August 2023 - December 2023

LEADERSHIP

Founder and Head Tutor, [GR8ER](#)

January 2023 - Present

- Ideated and launched the world's first academic network for IB MYP students due to the paucity of resources, an abundance of misinformation, and a lack of academic collaboration online.
- 2600 students from 87 different countries. Serving as a moderated crowdsourced repository, GR8ER accumulated more than 600 questions, 700 answers, and 400 resources in the month of May (exam season). Uploaded more than 90 personal resources myself as an MYP Honor Roll Student and a Perfect Scorer in 8 different MYP subjects.
- Used a novel feed personalization filtering system to eliminate the arduous task of sourcing study materials; allowed students to customize the feed and find specific resources ranging from revision material to practice questions.
- Onboarded and trained 5 members of the leadership team in operations and marketing alongside 16 other team members and moderators.
- Developed an artificial intelligence model to launch a peer-to-peer tutoring system responsible for matching tutees with the ideal tutors based on their strengths and weaknesses.
- Administered 57+ hours of tutoring in the first month for all GR8ER tutors. As the head tutor, I assisted and worked closely with tutors to create bespoke lesson plans (Defining clear learning objectives aligned with the tutee's level, selecting effective teaching methods, shortlisting resources, drafting a lesson structure, etc) for each student to maximize impact. Personally tutored 8 tutees myself.
- Reached out on online platforms like Instagram by making engaging bite-sized 10-second content to share tips for MYP students. Currently at 200+ followers.
- Used Next.js (React), Firebase, Chakra UI, Moment, Framer-Motion, Recoil, and Vercel for the platform alongside Pandas (Python) and Google API client for the Peer-to-Peer Tutoring facet.

Founder, [Hypertensight](#)

December 2022 - Present

- Developed a deep-learning augmented ophthalmic diagnostic tool for the early detection and autonomous diagnosis of Hypertensive Retinopathy, an ocular complication of Hypertension (High blood pressure).
- Created a dual approach solution: An adjustable smartphone-compatible non-mydratic fundus imaging kit based on indirect ophthalmology, and a deep learning model that detects hypertensive retinopathy using fundus images.
- Integrated an instant risk stratification functionality to aid mass screening that encapsulates a comprehensive report with the percentage risk of being diagnosed with Hypertensive Retinopathy alongside other patient details.
- Aimed at providing holistic access (both camera and software) to low-resource rural settings to help aid screenings without specialist intervention, while simultaneously making the software in isolation reach ophthalmologists to help increase time efficiency and accuracy.
- Used Yolo V8 with image optimization techniques such as CLAHE optimization and Green Channel

Extraction; Used Streamlit to design and deploy GUI (Graphical User Interface).

Founder, [Unravel](#)

June 2022 - Present

- Programmed and implemented an app to equip children with real-world skills by gamifying cognitive training exercises.
- Categorized app based on Logical Reasoning, Attention, and Memory with multiple-choice engaging questions.
- Received 600+ downloads through the Play Store.
- Used Java, Firebase, MySQL, and XML (to design GUI) on Android Studio.

Member, Student Council (Head of Well-Being)

November 2021 - November 2022

- Responsible for leading a community of 1000+ students and mentoring over 10 well-being ambassadors
- Established a buddy system pairing students across different grades to foster empathy, inter-grade connections, and a supportive community. Facilitated regular peer support meetings that reduced anxiety and improved mental health. Enabled mentors to develop leadership and communication skills while assisting mentees in effectively communicating their problems.
- Organized a week-long event focused on mental, emotional, and physical health, engaging over 1000 students with activities such as daily workshops on stress management, mindfulness sessions, fitness challenges, and nutritional seminars. Conducted feedback surveys post-event, which showed a 30% increase in student awareness of available mental health resources and a 20% increase in student-reported well-being.

COMMUNITY ENGAGEMENT

Technology and Society Head, Baal Uddhar

September 2022 - Present

- Provided monthly training to 60+ children of the support staff of Pathways School, Gurgaon.
- Taught crucial technology prerequisites starting from MS Word, Excel, PowerPoint, and Canva.

Founder, The Cure Movement

December 2017 - Present

- Taught basic mathematics and English to 35+ underserved children from my neighborhood over summer and winter breaks.
- Created custom lesson plans and individualized education plans for each student.
- Fund-raised (INR 2 lakh) to collect and donate educational and basic humanitarian supplies ranging from pencils, books to blankets, toothbrushes, clothes, utensils, and lamps.

SUMMER & WINTER PROGRAMS

National University of Singapore

July 2023

Artificial Intelligence and Machine Learning

- Led a team of 5 students in a comprehensive project that predicted customer churn rates using various algorithms including decision tree, logistic regression, linear regression, SVM, CNN, RNN, ANN, and K-means Clustering.
- Immersive program involving sessions with a Senior NUS Professor on advanced AI concepts and algorithms with hands-on activities.

BITS Pilani, Hyderabad

December 2022

YEB (Young Entrepreneurs' Bootcamp)

- Acceptance rate of <1.71%
- Selected as Top 50 from 1000+ applications to interact with renowned entrepreneurs and faculty.
- Led a team of 6 students; pitched and conceptualized Hypertensight at a startup pitching competition.
- Judged by 4 venture capitalists and won runners-up.

INTERNSHIPS

Data Science and Analytics Intern, Chirpn, Gurgaon

June 2024 - September 2024

- Currently involved in using Google Looker Studio to generate comprehensive reports for skill assessments conducted with students from a school.

Artificial Intelligence Intern, Amazon Web Services, Singapore

July 2023

- Led a team of 6 students to create a healthcare chatbot, contributing to a groundbreaking project focused on healthcare innovation. Aimed at providing probable diagnosis based on symptoms, helping patients book appointments based on proximity in Singapore.
- Used Amazon Lex to enhance patient engagement and streamline information dissemination.

Augmented Reality Intern, Awwgment, Gurgaon

May - June 2023

- Developed AR menu cards for a prestigious Las Vegas resort to elevate the dining experience through immersive technology.
- Spearheaded an innovative AR box experience for Manscaped trimmers, seamlessly showcasing grooming technologies with AR. My exploration extended to the intricacies of Google Maps technologies understanding how the street-view was created in the software and how to replicate that.
- Acquired proficiency in Model Viewer, A-Frame programming language, and Blippar.

ACADEMIC HONORS & AWARDS

- Received the School Award for Academic Excellence in 2019, 2020, 2021, 2022 for multiple subjects including Extended Mathematics, Physics, Chemistry, Individuals and Societies, Design, and English Language & Literature.
- Received the Honor Roll for outstanding academic achievement in the MYP 5 (10th Grade) Assessments for scoring a 53/56 (Top 1% of the Grade)
- Received Gold Medal of Distinction in International Math Olympiad for 3 consecutive years, 2020 - 2023
- Received Gold Medal of Distinction + Top 50 Internationally in International English Olympiad for 3 consecutive years, 2020-2023

EXTRACURRICULARS

Video-Editing

June 2020 - Present

- Curated professional videos, films, and montages for various occasions including school assemblies and weddings
- Created a YouTube channel with 1600 subscribers posting professionally edited cinematic short films
- Produced a video for the Breakthrough Junior Challenge; placed top 10%

Sports

Football

- Member of High School Varsity Football team for 6 years
- Attended various school-level and national tournaments including ISSO and Subroto Cup

Athletics

- Member of High School Varsity Athletics team for 3 years
- National Bronze Medallist in Hammer-Throw at ISSO

SKILLS

- Fluent in English, Hindi, and French
- Comfortable utilizing research tools such as Google Scholar and Noodle Tools
- Excelling at Video Editing and composing animations