

Profile

Personal information

Name	Keswani, Hemang Manish
Share different name	No
Birthdate	11/01/2007

Contact details

Email, Phone	hemangkeswani@gmail.com, +91.985-050-4696, Mobile, No other telephone
Permanent address	Baner Park Society 254/3/11 Baner, PUNE, 411007, IND

Demographics

Gender Identity	Male
Sex	Male
Pronouns	He/Him
Military status	None

Language

English	First Language, Speak, Read, Write, Spoken at Home
Spanish	Speak, Read, Write
Hindi	Speak, Read, Write, Spoken at Home
French	Speak, Read, Write
Sindhi	Speak, Spoken at Home

Geography and nationality

Citizenship status	Citizen of non-U.S. country
Birthplace	Pune, India 0 years US
Other citizenships	India

Current US Visa	B-2 Tourist, P6269444 Issued: 03/18/2021
Intended US Visa	F-1 Student

Common App fee waiver

Fee waiver requested	No
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Family

Household

Parents	Married
Home	Both Parents

Parent 1

Mother

Name	Mrs. Priya M Keswani (Dulani)
Email, Phone	priyamanishkeswani@gmail.com, +91.9822010087, Mobile
Occupation	Homemaker (full-time)
Education	Graduated from college/university

Parent 2

Father

Name	Mr. Manish S Keswani
Email, Phone	manishkeswani@papertrue.com, +91.9822024185, Mobile
Occupation	Business owner or proprietor, Self-Employed
Education	Graduated from college/university

Siblings

Heervansh Keswani, Age 23

Education

Current or most recent secondary school

Indus International School - Pune, 576 Bhukum Near Manas Resort, Taluka Mulshi, Pune, Maharashtra, IND, Independent, CEEB: 671811 (08/2024 - 05/2026)

Boarding school	Yes: Not living at school
Other	Vidya Valley School, India, Independent (06/2022 - 05/2024)
Progression	No change in progression
Graduation Date	05/2026

Colleges & universities

Grades

Rank	na / 130
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Current or most recent year courses

First semester	Second semester
MATH - Mathematics: analysis and approaches (HL) - (IB)	
PHYS - Physics HL - (IB)	
COMPSCI - Computer science HL - (IB)	
CHEM - Chemistry SL - (IB)	
ENG - English A: Language and literature SL - (IB)	
LANG - Spanish B Ab Initio SL - (IB)	
OTH/ELE - IB Core Curriculum: Theory of Knowledge/Extended Essay - (IB)	

Honors

Student of the Year/Principal's Award for Best Outgoing Student	School	10
Runners up - Asian Regional Space	International	11, 12

Settlement Design Competition

Best Engineer - National F1 in Schools/STEM Racing Competition Team Captain	International	11, 12
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Winner - Indian National Space Settlement Design Competition	International	11
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Outstanding Performance – International NSS spUN Debate Team Captain	International	10
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Future plans

Engineer, Doctorate

Testing

Leaving Exams

Yes, Taken 0

Activities

Computer/Technology

11, 12 School, Break 21 hr/wk, 8 wk/yr Continue	Founder and Captain, Doppler Racing, raised ~\$6.8k, Led 8 member F1inSchools team. Expanded STEM, social outreach via Heart4Animals, TreeMap, AARA Won Best Engineered; set competition record; collaborations: IITM, IISERP, Ansys, SolidWorks; made robot to manufacture; CAD, CFD, FEA; 3D printed car
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Community Service (Volunteer)

11, 12 School 4 hr/wk, 12 wk/yr Continue	Tutor, Hospice Volunteer, Organized donation drive, Led school initiative to visit local hospice center, collected over 300 items of donation clothing Taught 2 19-year-old Afghani girls coding, math, astrophysics; enabled independent python, OOP projects and phET simulations (beyond IB requirements)
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Other Club/Activity

11, 12 School, Break, Year 4 hr/wk, 30 wk/yr Continue	Founder @ Makers Club, 60+ member STEM community, mentored Auckland SDG winning team, Imperial STEMathon participating team, project based learning Built robotic arm, RC planes that plants seeds, Arduino projects, taught CAD, organized school-wide competitions, held weekly sessions (grades 6-12)
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Work (Paid)

12, PG School, Break 17.5 hr/wk, 6 wk/yr Continue	Founder and CEO @ scriptex.ai, research incubator, AI SaaS, optimizes research structure, workflow; facilitated 5+ quality research papers and guidance Agentic AI startup, self-made full stack website [https://scriptex.ai], collaboration with 5 schools in country [145 students to join pilot program]
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Research

11 School, Break, Year 4 hr/wk, 10 wk/yr	Submitted to IEEE; MDPI, IEEE (nearing end of peer review): signal processing & neural optimization, Bayesian & RL framework MDPI:1]Smart EV Charging Station Grid Infra Stability Statistical
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Continue

Analysis 2]Technical Analysis Feasibility & Productivity of Solar vs Nuclear Energy

Research

11

School, Break
8 hr/wk, 5 wk/yr
Continue

Team Leader/Head Researcher, CERN Collaborative Research Proposal, novel plasma diagnostic method using Cherenkov radiation
how plasma-induced RI variations affect radiation patterns, for non-invasive mapping of plasma density, endorsed by Head of Physics at IISER Pune

Internship

11

School, Break
20 hr/wk, 5 wk/yr
Continue

SWE Intern @ Prototech Solutions Pune, Developed optics-based, patent-pending software; with OpenCV, Python, for object dimensioning
Built real-time measurement algorithms and UI; optimized accuracy to 2 cm; collaborated with patent lawyers and hardware engineers

Internship

11

School
20 hr/wk, 4 wk/yr
Continue

Astrophysics Intern under Abhishek Mohapatra, Researched and analyzed stellar photometry & light curves; quantified universal expansion topology
Processed stellar flux data; modeled type 'Ia supernovae' light curves; derived 'H0' via Python regression; validated cosmological topology models.

Other Club/Activity

11, 12

School, Break
4 hr/wk, 30 wk/yr
Continue

Extensions of Doppler Racing (community orgs), Heart4Animals, TreeMap, AARA, impacting animals, reforestation, community (funding raised \$2800+)
Rescued 150+ stray animals in Pune, rehabilitated for shelters; Used drones and image detection to document 1500+ trees; Donated to hospice NGO

Other Club/Activity

9, 10, 11, 12

School, Break, Year
5 hr/wk, 40 wk/yr
Continue

Other activities/hobbies/interests, Sports, 3yrs bodybuilding, Music
National-level U17/U19 soccer gold medalist, regional basketball & tennis silver medalist (both); Trinity piano (Gr 4) & guitar (Gr 3) distinctions.

Responsibilities and circumstances

- Assisting family or household members with tasks such as doctors' appointments, bank visits, or visa interviews
- Managing family or household finances, budget, or paying bills
- Commuting 60 minutes or more to and from school each day

Writing

Personal essay

Share an essay on any topic of your choice. It can be one you've already written, one that responds to a different prompt, or one of your own design.

Growth: Across Space and Time

When you think of Afghan women oppressed to silence by the Taliban and stripped of their right to education, you don't typically imagine them snorting with laughter. Maral and Neilab's guffaws lasted a solid fifteen minutes. I struggled to hold a bed sheet by its edges, arms stretched wide, trying to demonstrate how mass warps spacetime while a tennis ball with a smiley face drawn on it (the sun, obviously) kept rolling off. They surmised that I was trying to demonstrate a gravitational field. They were brilliant, but denied education by war and its repercussions. Their story is similar to that of my great-grandfather, who fled contested Sindhi territories during the 1947 India-Pakistan Partition, carrying his own story of rupture and rebuilding. Their families live echoes of that loss in harsher, ongoing realities. We were separated by nations and decades (space and time), but connected by empathy and curiosity. They inspire me to strive to do whatever it takes to learn, evolve, question existing frameworks, and build impactful ones of my own.

This shaped everything I built afterward. The international high school I joined in junior year had a STEM lab with 3D printers, fully loaded computers, and electronics workbenches. Unfortunately, few students knew how to get around using all that fancy equipment, and the hum of innovation the space was meant for had long faded. I launched *Makers Club* to create compounding access, where each student who learned could teach the next. It was a simple concept: want to make something? Learn how to, and teach it too.

The club grew to 60+ members. An aeronautics group formed and built a foam-cast RC plane to remotely deploy reforestation seed balls over barren hillsides near our school (like environmentally-friendly *Lockheed Martin*, just without the pay package). This is where I developed my appreciation for systems of scale, specifically those that can be both personal and focused on large-scale impact. Since I passed the baton to the next generation of engineers, I'm elated to check in now and then to hear about its evolution, like the creation of a "*Machine Learners*" subgroup, or that a group of students built an ultrasonic Arduino detector to alert a classroom of napping students whenever a teacher walked by.

I went on to start and lead *Doppler Racing*, an engineering team that competed at the national level of '*Formula 1 in Schools*'. Sleepless nights working and endless debate over technical drawings formed a quintessential engineering experience. For professional insight, we sent hundreds of cold

emails and LinkedIn messages, yielding collaborations that gave me life-changing industrial exposure at the best universities in India, growing into lasting connections for later projects such as a research experiment proposal for *CERN*, endorsed by *IISER Pune*'s head of Physics.

This competition is where I developed my respect for enterprise and engineering. I convinced *Ansys* to sponsor our use of their cutting-edge software (worth \$30,000+/yr), as well as *SOLIDWORKS* (\$3,200+/yr). We raised another \$2,000+ from sponsors through our social media outreach. I built and programmed a robotic arm, applying inverse kinematics to achieve the assembly precision our process demanded. The engineering in this competition was more than just theory: nothing could have prepared me to watch the front wing I took 3 hours to design fall apart on the printer bed because I failed to read the 50 page filament documentation booklet written in Chinese that had a link to a website that had been offline since 2018 but was archived on a subreddit where a deleted user's comment clarified that at temperatures below 150 degrees Celsius the minimum printable radius was reduced by 12%. I love engineering.

Just like nuclear fission, where a slow-moving neutron splits an unstable atom, releasing energy and additional neutrons that trigger a chain reaction, I will build the entrepreneurial infrastructure to drive sustainable technological progress that genuinely improves lives.

Challenges and circumstances

I am grateful to not have faced any genuinely serious or insurmountable challenges, but I feel it fit to explain that at the end of tenth grade, I had to switch schools and curricula because ICSE doesn't offer anything beyond tenth grade. I chose the IB because I wanted the international curriculum and interdisciplinary approach that would prepare me for studying abroad.

Earlier, however, I struggled with the Ninth grade due to circumstantial difficulties: my father got late-wave COVID and was in the ICU for weeks, my second grandfather passed away, and it was the first year since returning to in-person school. Tenth grade became the turning point where I stopped coasting and started approaching education with real intention.

The language decision in eleventh grade showed me what that shift meant in practice. After four years of French in ICSE, my advisors suggested I continue with French in IB since it would be more scoring. Instead, I chose Spanish because I wanted exposure to a new culture and language. The point of switching to IB was to challenge myself beyond what was comfortable, and that meant choosing the harder path over the convenient one.

The transition to IB wasn't smooth at first, but it gave me the academic framework I needed to think critically about the projects I was building outside the classroom.

Additional information

For Doppler Racing, I reached out to professors from:

IITM - Indian Institute of Technology, Madras

Making cold phone calls and emails. These collaborations helped me conduct research on fluid dynamics and structural analysis to optimize the design and engineering that went into Doppler Racing's flagship car. Our fluid dynamics research yielded the ideal values for the drag and lift coefficient for our use case, resulting in the creation of the fastest car at F1 in Schools Indian National Finals, and winning the Best Engineered Car among 120 participating teams.

My connection with Dr. Aparna Deshpande from IISERP also transferred to a later project I took on: a research experiment proposal to CERN. This was one of the most interesting projects I led, as we were an amateur, high-school physics team trying to find a novel topic to investigate. We were genuinely humbled by the complexity of experimental particle research, and were thus elated to come up with "*Utilizing Cherenkov Radiation From a Correspondingly Altered Dielectric Medium for Non-Invasive Plasma Diagnostics at CERN's Proton Synchrotron*".

Physics Extended Essay: *Investigating the Effect of Thread Length and Radial Thread Count on Structural Load Capacity and Displacement Under Load in Orb-Weaver Spider Web Geometries Using Custom Developed Finite Element Analysis*

I developed algorithms in Python to generate 3D models of radial sections of spiderwebs, then further utilized Python to perform computational FEA (Finite Element Analysis - structural analysis) to determine the strength of these spiderwebs on variance of web length and radial thread count. Before working on this project, I never comprehended that programming could be powerful enough to design actual CAD models of items, let alone perform analysis to the detail of millimeters and micronewtons on the strength of said items.

Education progression

Details

Education progression details No change in progression

Required explanation

Secondary school change

This school only provided schooling till the 10th grade. I was also more interesting in pursuing an IB diploma through grade 11 and 12.

University of San Francisco questions

General

Start term	Fall 2026
Admission plan	Early Action
intl_logic	Yes
F1 Visa	Yes
Intl Financial Contribution Fall	100000
Do you want us to consider your SAT/ACT scores for admission and scholarship purposes? Please note that once you submit your application, you will not be able to change your selection.	Yes, please consider my SAT/ACT scores in my application.
Gap Year	No
USF Specific Fee Waiver	Not Applicable
Sex	Male
Gender	Male

Academics

Academic Program	Engineering
Please select your concentration.	Electrical Engineering
Alternative Major	Physics
ENG Pre-Calc	Yes
ENG Pre-Calc Grade	A
Accelerated Master's Program	None
Special academic programs	None
BSP Interest	No
HS Type	Other religious or private high school

Activities

Activity 1	Study Abroad
Activity 2	Fraternities/Sororities
Activity 3	Music: Instrumental
Activity 4	Honor Societies
Activity 5	Student Government

Contacts

Previously applied	No
How have you interacted with the University of San Francisco?	Conversation with admissions office, current student, coach, alumnus, or faculty member
Contact consent	I consent to be contacted by the University of San Francisco at the mobile phone number provided below.
Mobile Phone Number:	+91.9850504696

Family

Sibling applied	No
Relative Employee	No

Affirmations

By submitting this application, I affirm my understanding of and agreement to the statements found here: <http://www.commonapp.org/affirmations>.