

GOYAL, SOUMIL

FY, RD, Fall 2025, 02/08/2006 CEEB: 443405 CAID: **36268514**

FERPA: Waived

Submitted: 01/06/2025

Profile

Personal information

Name GOYAL, SOUMIL

Share different name No

Birthdate 02/08/2006

Contact details

Email, Phone soumil.goyal@yahoo.com.sg, +1.832-212-5160, Mobile, +65.85485804,

Mobile

Permanent address 33 Margaret Drive, #32-230 Singapore, 140033, SGP

Demographics

Gender Identity

Sex

Male

Pronouns

He/Him

Military status

None

Language

Hindi First Language, Speak, Read, Write, Spoken at Home **English** First Language, Speak, Read, Write, Spoken at Home

Mandarin Speak, Read, Write

Geography and nationality

Citizenship status Citizen of non-U.S. country

Birthplace Mumbai, India 9 years US

Other citizenships Singapore

Current US Visa E-2 Dependent of Treaty Investor, 20222298780003 Issued:

1

09/20/2024

Common App fee waiver

Fee waiver requested Yes, Signed: SOUMIL GOYAL

Family

Household

Parents Married

Home Other, Alone (not supported by any parents nor guardians)

Parent 1

Mother

Name Mrs. Dolly Goyal (Mittal)

Email, Phone dreamgirl2106@yahoo.com, +1.832-773-9978, Mobile

Occupation Other, Dance Teacher, Self-Employed

Education Graduated from trade school or community college

Masters (2002), MKP College, New Road race course, Dehradun,

Uttarakhand, India

Parent 2

Father

Name Mr. Ashish Goyal

Email, Phone ashigoyal1@gmail.com, +1.281-687-9342, Mobile

Occupation Engineer, Employed, Sempra Infrastructure

Education Graduated from trade school or community college

Other (1999), Amravati University, New Express Highway, Ram Meghe

Square, Badnera, Amravati, Maharashtra, India

Siblings

Dhruv Goyal, Age 14

Education

Current or most recent secondary school

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, Public, CEEB: 443405 (09/2020 - 06/2024)

Progression No change in progression

Graduation Date 06/2024

Colleges & universities

Grades

Rank 18 / 755, Weighted GPA 4 / 4, Unweighted

Current or most recent year courses

First semester	Second semester
i ii ot oci ii cotci	Occoria scriicste

CALC - IB HL AA Mathematics - (IB)

CALC - IB HL AA Mathematics - (IB)

PHYS - IB HL Physics - (IB)

PHYS - IB HL Physics - (IB)

LANG - IB HL Mandarin Chinese - (IB)

LANG - IB HL Mandarin Chinese - (IB)

COMPSCI - IB SL Computer Sciences - (IB) COMPSCI - IB SL Computer Sciences - (IB)

ENG - IB HL English Language and Literature - (IB) ENG - IB HL English Language and Literature - (IB)

HIST - IB Psychology SL - (IB) HIST - IB Psychology SL - (IB)

OTH/ELE - IB Theory of Knowledge - (IB)

HIST - Personal Financial Literacy & Economics - (GFTED)

Honors

19+ trophies

Vex World Inspiration State/Regional, 10, 11, 12
All Star Award, FIRST International
District Engineering
Inspiration Award, &

2x Debate Nationals Qualifier; 2nd-Ranked Extemporaneous Speaker in NSDA South Texas	State/Regional, National	10, 11, 12
Autodesk University Industry Talk Host (2023)	International	12
Future Engineers Veterans' Pin Design Challenge Finalist	National	11
Ambition Accelerator Top Voted Idea &	National	11

Community-based organizations

CBO 1 Lamar College Corner

Counselor Mrs. Cristal Hernandez

Email, Phone Cristal.Hernandez@houstonisd.org

CBO 2 Communities In Schools

CBO 3 Lamar Writing Lab

Future plans

"Inspirational" - Mark King (Taco Bell CEO)

Other, Roboticist, Doctorate

Testing

SAT tests

Evidence-based 750 12/01/2023

Reading and Writing

Math 750 03/21/2023

Taken 2
Planned 0
SAT Essay No

AP Subject Tests

Government & Politics: 5 05/2023

United States

 World History
 5
 05/2022

 Human Geography
 5
 05/2021

IB Subject Tests

Physics-HL-English 04/2024

Psychology-SL-English 05/2024

Computer Science-HL- 04/2024

English

English A: Language 04/2024

and Literature-HL

Mathematics Analysis 04/2024

and Approaches-HL

Chinese B - Mandarin- 04/2024

HL

Activities

Robotics

10, 11, 12 School, Break, Year 14 hr/wk, 40 wk/yr Continue

Team Captain/President, DiscoBots: FRC, Vex, Combat Robotics, and Outreach Teams

Manage 80+ members & 10 teams to create industrial-level, internationally accomplished robots; made team history in most awards each season.

Research

10, 11, 12 Break 3 hr/wk, 20 wk/yr Continue

Founder/President, Robust Adaptive Network Disaster Response System

Invent & lead a novel solution to disaster response with support of the Mayor of Houston, Taco Bell Foundation, DiscoBots, ION Houston, and more.

Athletics: JV/Varsity

9, 10, 11, 12 School, Break, Year 9 hr/wk, 40 wk/yr Continue

Other Sport, Black-Belt & Jyokyonim (Instructor), Houston Center For Taekwondo

Learn & compete under the World Taekwondo Federation for sparring, forms, and weapons. Help guide ~10 state-level competing students.

Debate/Speech

10, 11, 12 School 6 hr/wk, 37 wk/yr Continue

Team Captain/President , Lamar Competition Speech & Debate Team Competed nationally; guide 50+ students in NSDA, TXFA, UIL and HUDL tournaments; managed through administration to handle organizational tasks.

Other Club/Activity

10, 11, 12 School 2 hr/wk, 30 wk/yr Continue

Founder/President, Pedal Power Community Project

Solo community welfare project of off-grid, resilient, and climate aware power generation solutions. Won \$750 from NWF and installed the project.

Internship

11, 12 School, Break 4 hr/wk, 19 wk/yr Continue

Intern & CNC Specialist, ION Houston Prototyping Lab

Restored a professional CNC machine for community use; maintained this industrial facility's manufacturing & engineering equipment.

Internship

10, 11, 12 School, Break 2 hr/wk, 30 wk/yr Continue

Web Developer/Designer, Steps For Dancing

Learned to design, program, and launch websites; Create and maintain an online presence to help my mother's startup: https://www.stepsfordancing.com

Theater/Drama

9, 10 School 12 hr/wk, 30 wk/yr Continue

Troupe Officer & Varsity Play Productions Actor, International Thespians Honours Society

Acted in various lead, sub-lead, and technical roles for play productions; coordinated productions, rehearsals, and competitions amongst ~ 50 members.

Science/Math

12 School 4.5 hr/wk, 36 wk/yr Continue

Team Captain/President, Lamar Competition Mathematics Team

Compete at a regional and state level in 3 events; manage and mentor 15+ students in competition, SAT, UIL, and higher-level mathematics.

Community Service (Volunteer)

10, 11, 12 School 1.5 hr/wk, 20 wk/yr Continue

Den Chief; Patrol Lead (2021), Boy Scouts of America (Troop 55)

Achieved Star ranking in USA's largest troop; Volunteer to guide younger scouts in new skills & activities; organized camps and lessons for my patrol

Writing

Personal essay

Some students have a background, identity, interest, or talent that is so meaningful they believe their application would be incomplete without it. If this sounds like you, then please share your story.

"Let's walk around this way" someone says, but I can't hear them. While all the others are on their detour, I am spellbound by this hulking giant. Its rusty forks unfold with a practiced ease, aligning perfectly with the sleeves of the commercial waste unit. The machine raises this vessel with a confidence born of experience, feeling the weight through the depression of its front-axle suspension. Once ready, it swings the massive load over the front, resonating clanking vibrations that ripple through the surroundings, turning the mundane act of waste disposal into my captivating spectacle. As the payload is turned upside down, it's hung high over the receiving hopper, dumping an avalanche of waste. In this moment, the *dump truck* is more than just a machine; it's a reminder of my identity, interests, and mindset.

In the same way I was transfixed by the dump truck's machinery, whenever I find a fascinating piece of software, structure, or science, I lose track of time, putting myself in the position of that product developer. I ponder on the foresight the engineers had to make certain that the garbage truck's forks are still usable even if the vehicle is on an incline. I admire the programmers that created robust threads of continuous sensor-checks that protect from thousands of failures. I look up to the designers who had to ensure the garbage truck's center of gravity would remain positioned well enough that swinging the heavy bin over the front wouldn't be a hazard.

All these ingenious thinkers juggled countless factors like durability, cost, safety, manufacturing difficulty, regulations, repairability, and time-constraints to finish this spectacular product, an invention that serves as a backbone of essential infrastructure.

As I aspire to be part of that impactful community of makers, I am continuously thankful that I have the opportunity to lead in a similar way. For example, from my current experience as the team captain of a large, growing robotics team, I practice the intricate trade-offs, balances, and decision making required of a successful leader. While managing 80+ members across 7 separate schools to develop industrial-level, internationally competing robots, I regularly face crossroads where all decisions come with a list of cons and wishes of pros. Every path is uncertain: every path looks good, yet every path seems bad. Although such a position deters most minds, I find myself, again, spellbound by the role of this leader. I swiftly, yet level-headedly, analyze possibilities to proceed on the best-seeming path, conquering obstacles, failures, and surprises along the way.

Additionally, these successes never happen alone. Akin to the way that garbage trucks don't function without waste containers, and the whole system doesn't work without landfills, I recognize the vitality of collaboration and work with all to achieve greater accomplishments.

Furthermore, as I advance through this maze of choices, I make use of my deeply reflective nature to squeeze all the lessons learned from any result through the process. This builds a collection of clues and maps, an arsenal of experience to guide future journeys. Moreover, I am always ready to discard any opinion or notion proven wrong along the way, discipling myself that my attachment to any beliefs should not restrict my potential and my actions.

This combination of observation, decision-making, leadership, and reflection is a core mentality so meaningful to me that all my successes are attributed to this critical mindset. More importantly, all my failures are systematically reflected upon and built from to enhance my overall foresight and character for the future. With this approach, a cornerstone of my identity, I aim to leverage these traits in guiding teams towards collaborative success.

By weaving the harmony of curiosity, adaptability, and resilience into the fabric of leadership, I endeavor to inspire others in navigating our world's intricate terrains, unveiling unique, impactful solutions—each akin to their own dump truck, a critical culmination of multifaceted design with purposeful execution.

Community disruption

My family and friends have endured the Mumbai Floods, Turkey Earthquakes, Hurricane Harvey, and Winter Storm Uri. These events left a profound impact on my outlooks and initiatives.

Living through the floods, storms, winds, ice, and debris was an ever-present sense of impending doom. It was scary knowing if there was some emergency, we had no means of calling for help. It was dreadful knowing that as our supplies dwindled, there were no shops to stock up essentials.

Despite these experiences, I consider myself lucky that my immediate family escaped permanent harm. This fortune reminded me of the capricious, unforgiving nature of such events and their far-reaching consequences.

This recognition of the unresolved challenges society faces in dealing with natural disasters led me to inventing the Robust Adaptive Network (RAN). RAN is a system of drones and rovers that provides essential cell signals, delivers urgent supplies, and relays important information during disasters. I've worked on this project with support from the Mayor of Houston, the Taco Bell Foundation, DiscoBots, Ashoka, ION Houston, and more.

But even with my current programming models, 3D designs, and system prototypes, I acknowledge the years of challenges ahead in realizing my invention. This is a significant reason of I want to

study Engineering and Computer Science in college. I believe that many global problems can be addressed through advances in technologies similar to RAN. My pursuit of your world-class education and my insights from personal experience drive me to solve pressing issues in the world.

Additional information

1) After my birth in India, my family relocated to Singapore, where we settled and gained citizenship. Unexpectedly, when I was 8, we moved to the US for a 2-year project in my father's job. However, as that job lengthened to various reassignments and the 2 years extended indefinitely, I have now lived in the US for 9 years. However, as still a Singaporean citizen, I now face my mandatory military service term.

The prospect of diverging from the traditional trajectory and delaying my college experience is undeniably disheartening. While the excitement of higher academics approaches for many, I have to trudge on a different path. It's easy to perceive this as a setback, an interruption to the flow of education and personal growth, but I choose to cultivate a positive mindset. I see this national service commitment as a unique chapter in my life's narrative. It's an opportunity to embrace a change in lifestyle and forge bonds in my old home. By approaching this mandatory service with an open mind, I anticipate gaining valuable insights and skills that will enrich my future journey.

Rather than viewing these two years as a delay, I see them as an investment in a more holistic self. Now, being 6-months into my NS, I am on-track to become an Officer for the SAF, an opportunity for only the top 10% of all Singaporean boys and the highest rank achievable by any National-Serviceman. After I commission as a Second-Lieutenant, I'll be a Platoon Commander, responsible for at least 64 lives under my leadership. Through my NS, I have also earned the IPPT Gold Award, and Best Company Award.

2) One unique result of my Indian, Singaporean, and American culture exposure is my proficiency in Hindi, Mandarin, and English.

I hold the traditional backgrounds and perspectives of my heritage to be very valuable. This is one of the reasons I maintain a native proficiency in my mother tongue, Hindi. Along with this, my education outside home has been in English, so I am also natively proficient in English.

However, after being born in India and immigrating to Singapore, I decided to pursue learning Mandarin so I could better connect with the vast majority of Singaporeans who are Chinese. Even after advice against learning this impossible language at that late age (especially since most Singaporeans speak English anyways), I worked hard to learn the language and surpassed some native speakers of my age. Although I am now in the US, where I lack much incentive to keep up my Mandarin, I still practice and improve. I have written essays, won speech contests, and can hold a proper conversation in Mandarin. I am especially proud of this skill because I do not have any Chinese relatives/background to build off of, I instead had to start independently and have successfully reached a respectable position.

3) I would like to highlight some of my community involvements, here is a link to my community-hours log: https://soumilgoyal.com/index.html#community-service-log

Through this record, you can see that a majority of my community service hours log are dedicated to actions like teaching younger peers or volunteering at educational competitions. One reason for this is because of the high value I place on education. I am grateful for inspiring education I have received, and I admire the power to inspire others similarly. Additionally, especially relating to my 90+ hours of community service towards multiple competition, as a competitive student, I have been thankful for all the competitions I have been able to participate in. Amongst these events, none of them ran without volunteers, meaning that my accolades, skills, and experiences were built upon the gracious selflessness of other volunteers. From this, I have a calling to continue their impacts by volunteering in competitions, ensuring that any other students will have the opportunity of smooth, fair, and constructive competitions.

Thanks for reviewing my application.

Sincerely,

Soumil Goyal

Education progression

Details

Education progression No change in progression **details**

Courses & Grades

Course levels legend

REG - Regular/standard

ACC - Accelerated

ADV - Advanced

AP - Advanced placement

Cambridge AICE AS A-Level - AS/A-level/International A-level, Cambridge

AICE

C PREP - College prep

DUAL - Dual enrollment

ENRCHD - Enriched

Cambridge IGCSE - GCSE, IGCSE

GFTED - Gifted

HGH HNR - High honors

HON - Honors

INTSV - Intensive

IB - International Baccalaureate

PRE IB - Pre-international Baccalaureate

RGNTS - Regents

N/A - Not applicable

Non-numeric/letter grade legend

I - Incomplete

NG - No grade

F - Fail (Pass/Fail)

P - Pass (Pass/Fail)

S - Satisfactory

U - Unsatisfactory

W - Withdrawn

WF - Withdrawn (Failed)

ME - Medical excuse

Grade 9

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, CEEB: 443405

School Year 2020-21

Schedule Semesters

			Grades (1-100)			Credits		
Subject	Course Name	Level	S1	S2	Final	S 1	S2	Final
OTH/ELE	SUBJ1	N/A	100	100		0.5	0.5	
MATH	ALG 2	PRE IB	100	100		0.5	0.5	
HIST	APHUMGEO	AP	99	98		0.5	0.5	
BIOL	BIO	PRE IB	99	98		0.5	0.5	
OTH/ELE	HLTH ED1	N/A		98			0.5	
ENG	ENG 1	PRE IB	100	100		0.5	0.5	
LANG	CHIN 2	PRE IB	100	100		0.5	0.5	
OTH/ELE	PRINBMF	GFTED	100	100		0.5	0.5	
ART	TH2	N/A	Р	Р		0.5	0.5	

Grade 10

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, CEEB: 443405

School Year 2021-22 Schedule Semesters

		Grades (1-100) Credi			Credits			
Subject	Course Name	Level	S 1	S2	Final	S 1	S2	Final
HIST	APWHIST	AP	100	98		0.5	0.5	
CHEM	CHEM	PRE IB	99	99		0.5	0.5	
OTH/ELE	DEBATE 2 A	HON	99			0.5		
OTH/ELE	DEBATE 1 B	N/A		99			0.5	
ENG	ENG 2	PRE IB	99	99		0.5	0.5	
OTH/ELE	ENGDSPR1	N/A	100	100		0.5	0.5	
LANG	CHIN 3	PRE IB	100	100		0.5	0.5	
PRE-CALC	PRE CALC	PRE IB	99	99		0.5	0.5	
ART	TH2PROD	N/A	Р	Р		0.5	0.5	

Grade 11

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, CEEB: 443405

School Year 2022-23
Schedule Semesters

			Grades (1-100)			Credits		
Subject	Course Name	Level	S 1	S2	Final	S 1	S2	Final
HIST	APUSGOVT	AP	99			0.5		
OTH/ELE	DEBATE 1 A	N/A	100			0.5		
OTH/ELE	DEBATE 2 B	HON		100			0.5	
LANG	IBCHINHL	IB	99	99		0.5	0.5	
SCI	IBTACSSL	IB	97	99		0.5	0.5	
ENG	IBLANLTHL	IB	98	99		0.5	0.5	
CALC	IBMAAHL	IB	98	98		0.5	0.5	
PHYS	IBPHYSHL	IB	97	97		0.5	0.5	
HIST	US HIST	PRE IB	99	98		0.5	0.5	
OTH/ELE	IB TOK A	IB		98			0.5	

Grade 12

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, CEEB: 443405

School Year 2023-24

Schedule Semesters

			Grades (1-100)				;	
Subject	Course Name	Level	S 1	S2	Final	S 1	S2	Final
ENG	IBLANLTHL	IB	99	99	99	0.5	0.5	1
CALC	IBMAAHL	IB	99	98	99	0.5	0.5	1
SCI	IBPSYCSL	IB	100	99	100	0.5	0.5	1
HIST	PRSFNLT ECO	GFTED		97	97		0.5	0.5
LANG	IBCHINHL	IB	100	98	99	0.5	0.5	1
COMPSCI	IBTACSSL	IB	100	97	99	0.5	0.5	1
OTH/ELE	IBTOK	IB	100		100	0.5		0.5
PHYS	IBPHYSHL	IB	99	99	99	0.5	0.5	1

Other courses

Mirabeau B Lamar Senior High School, 3325 Westheimer Rd, Houston, TX, USA, CEEB: 443405

School Year 2018-19
Schedule Semesters

			G	Grades (1-100)			Credits		
Subject	Course Name	Level	S 1	S2	Final	S 1	S2	Final	
ALG	ALG 1	PRE IB	95	96		0.5	0.5		
GEOM	GEOM	PRE IB	6			0.5	0.5		
SCI	IPC	PRE IB	99	97		0.5	0.5		
ART	ART 1	N/A	100	98		0.5	0.5		
LANG	CHIN 1	N/A	100	100		0.5	0.5		

Stanford University questions

General

Entry Term Fall 2025

Decision Plan Regular Decision

Fee Waivers I do not meet any of these criteria.

Citizenship Citizen of non-U.S. country

Financial Aid Yes, I intend to pursue need-based financial aid from Stanford.

Interview InterestYes, I am interested in an optional interview. I understand that if my

school is not in a Stanford interview location that I will not be contacted. I also understand that there may not be enough alumni volunteers in my area so I may not be contacted for an interview. In both scenarios, I understand my application will be complete without an

interview.

No

Arts Portfolio Interest

ACT/SAT Scores Yes

Birth Country India

Birth city Mumbai

Years lived in U.S. 9

Years lived outside U.S. 9

Agree that work

submitted is my own

I affirm that the work submitted in my application is ultimately my own.

Academics

First Academic Interest Mechanical Engineering

Second Academic

Interest

Computer Science

Third Academic Interest Engineering Physics

Contacts

Previously applied Yes 01/2024

Reflections since last application

Since my last application, I have experienced transformative growth shaped by significant achievements and new challenges.

In my final high school robotics season, my team finished as national quarterfinalists and earned the prestigious District Engineering Inspiration Award. Upon graduating, I had earned the most awards and achieved the highest outreach impact of any DiscoBot before me. Beyond these accolades, I took pride in leaving a lasting legacy within DiscoBots, where the teams I founded have continued to win tournaments and maintain high rankings. These accomplishments affirmed my commitment to innovation, teamwork, and community impact.

Following high school, I had to enlisted in Singapore's National Service, which thrust me into an unfamiliar environment. Immersing myself in a culture I hadn't experienced since I was nine and adapting to the rigorous military training was difficult. Yet, through determination and adaptability, I thrived, achieving a top 10% rank and earning a spot in Officer Cadet School. This milestone symbolized my ability to overcome challenges and excel under pressure.

NS also brought an unexpected chapter of independence. With my family in the United States, I took full responsibility for managing my household alone in Singapore and paying my finances without parental support. These experiences honed my resourcefulness and maturity, instilling a high degree of accountability.

This last year has deepened my understanding of leadership, self-reliance, and cross-cultural adaptability—qualities I am eager to bring to Stanford. I am driven to build upon these foundations, leveraging my growth to contribute meaningfully to Stanford's vibrant, innovative community.

Family

Siblings applying Nο

Have any relatives ever No

enrolled in an undergraduate or graduate degree program at Stanford

University?

address

Have any relatives ever No

been employed by **Stanford University?**

Parent different Yes

Which parent has a

Parent 1, Parent 2 different address

Parent 1 Address 1415 Bonnie Brae St Apt F Houston, TX, 77006-5280, USA

Parent 2 Address 1415 Bonnie Brae St Apt F Houston, TX, 77006-5280, USA Number of parents 2

PARENT 1 Father

INFORMATION

First Name ASHISH
Last Name GOYAL
Occupation Engineer

Job Title Quality Engineer at Sempra Infrastructure

Employment Status Employed

Birth Country India
PARENT 2 Mother

INFORMATION

First Name DOLLY

Last Name GOYAL

Occupation Business owner or proprietor

Job Title Dance Teacher in Steps For Dancing

Employment Status Self-Employed

Birth Country India **Number of siblings** 1

SIBLING 1 First Name DHRUV
Last Name GOYAI

Education Level Completed grade/primary school

Short Questions

Most significant challenge society faces

Our biggest challenge is societal lethargy. While the loud minority of 'bad-guys' and 'good-guys' shout misinformation and tell lies, we apathetically consume that rubbish until accidentally falling to a side. If we break free from our lethargy, we'll see that the true solution is neither side, but somewhere in between.

Last two summers

2023: Scholarship to tech-camp, ION Prototyping Lab internship, learned to make convolutional-neural-networks, reunited with extended-family in India.

2024: Joined the Singapore Armed Forces, learned to interact in a "new" culture, earned a spot to Officer Cadet School, learned to manage all household duties myself, became fully financially independent.

Historical moment or event you'd like to witness

My Hindu upbringing emphasized God's divine teachings from our timeless holy texts. Yet, I struggle to accept them without question. Are the Vedas truly divine texts or just ancient humans' books? Were those mythological stories real? I wish to uncover the truths by witnessing the birth of my religion, Hinduism.

Extracurricular activity, job, or family responsibility

I am currently an Officer Cadet for the Singapore Armed Forces. I live in-camp Sunday to Friday, perform combat drills, survival training, physical exercise, mental tests, and leadership development, all so I commission as an officer in June and serve as a Platoon Commander, responsible for 64 lives under me.

Five things that are important to you

- 1. An education that teaches me how to learn.
- 2. A family of super close people I can fully trust.
- 3. Opportunities to grow, lands to conquer.
- 4. Collaboration with similar and differently minded people across communities.
- 5. <u>Flexibility</u> by growing in all-areas and maintaining balance (both subject-wise and life-wise).

Short Essays

Idea or experience that makes you excited about learning

Both a pencil and a cow require the same escape velocity to leave Earth (~11182 m/s)! This fact challenges my intuition. Typically, I'd assume that the greater weight of a cow would require a significantly higher escape velocity, but this initial assumption proves misleading. In this way, the idea of uncovering counterintuitive solutions excites my curiosity and compels me to delve deeper into the realms of learning.

My fascination with discovering these counterintuitive solutions was propelled during my exploration of physics. For instance, delving into the maths behind escape velocities unveiled the surprising truth that an object's weight has no bearing on its escape velocity. Fascinated by this result, I continued investigating to correct my underlying misunderstandings. I learned complex concepts like gravitational fields, potentials, and orbitals, enriching my understanding beyond the initial problem. Additionally, I gained a deeper understanding of fundamental concepts like weight, force, and speed which rewarded me with a more natural grasp of these subjects in future studies.

This pursuit of overturning assumptions and seeking counterintuitive solutions fuels my thirst for knowledge. It's not just about discovering unexpected answers to seemingly straightforward problems, it's about initiating a cascade of inquires that restructure my frameworks. This curiosity extends far beyond the boundaries of physics class; it's a lens through which I view the world. Whether in engineering, programming, debates, or other domains, I find myself drawn towards detecting patterns that herald surprising discoveries and I'm committed to nurturing this habit of fervently seeking the world's unexpected phenomena.

Note to future roommate

Dear Roommate,

Firstly, congratulations on your acceptance and attendance at Stanford University. You must be a fascinating person with interesting stories; I am excited to meet you! I wanted to kick-start our acquaintance with a little bit about myself. You'll easily find out all about my passions in robotics, engineering major, and whatever else later on. For now, I want to share my most significant trait, one that's harder-said, easier-written.

A major cornerstone of my character is that I'm a very open-minded guy. I see my opinions and beliefs as akin to an initial strategy in a chess game. I love playing chess, so I want you to attack me! Come counter my logic and defeat my plans. If you foil my tactics, I don't stubbornly adhere to the same approach. Instead, I adapt, learning from the experience and altering my strategy based on newfound insights. Likewise, when it comes to opinions and beliefs, I don't doggedly cling to them if they're challenged. I embrace the opportunity to learn, eagerly seeking to understand your alternative viewpoint and incorporate a new perspective into my thinking.

In essence, I invite you to challenge me. Argue with me, even if we agree, point out the gaps in my understanding, teach me about your background, beliefs, and alternative opinions. I know you have much to share, and I am eager to learn from you. I will be highly thankful if we can banter to make ourselves better.

Sincerely,

SOUMIL GOYAL (ProfessorPythagoras on chess.com)

Life experiences, interests and character that would help you make a distinctive contribution to Stanford

"100 rupees! That's so cheap, it's nothing in the US!" my younger brother exclaimed as he innocently read the restaurant-menu's prices, unaware of the insensitivity I perceived in his words.

We were on our customary holiday trip to India, a time reserved for reconnecting with our extended family and friends. Amongst the extended family, my parents were the only ones to ever leave India, first settling in Singapore and then the USA.

These experiences showed me some stark disparities. While my brother and I take advantage of high-speed internet, 3D printers, and hands-on extracurriculars, my cousins endure power outages, outdated technologies, and rote-memorization-driven schooling.

My brother's remark reminded me of inequities I've faced. In robotics competitions, private-school teams flaunt costly spare parts, while our inner-city public school struggles with limited resources. In debate, wealthier teams have hired mentors, whereas our school depends on volunteers. These disparities, though smaller than global development gaps, have also shaped my perspective.

These experiences taught me to recognize inequality and admire resilience—like my cousins overcoming limitations or my parents transforming their futures. They also motivated me to act. As captain of the DiscoBots, I initiated outreach to schools without robotics programs, integrating their students into our team. In 1.5 years, we reached 4 schools and \sim 6,500 students, expanding others' access to the education that shaped me.

I'm grateful for these diverse experiences. Whether through competitions, family connections, or outreach, I've gained a broader perspective and embraced the value of shared growth across different backgrounds.

Additional Background

Have you ever been No found responsible for a disciplinary violation at any educational institution you have attended from the 9th grade (or the international equivalent) forward, whether related to academic misconduct or behavioral misconduct. that resulted in a disciplinary action?

Affirmations

I confirm that I understand and agree to uphold the spirit and letter of the Stanford Honor Code and Fundamental Standard. I confirm that I understand and agree to uphold the spirit and letter of the Stanford Honor Code and Fundamental Standard. **STANFORD UNIVERSITY RESERVES** THE RIGHT TO **WITHDRAW YOUR** OFFER OF ADMISSION IF: 1) you show a significant drop in academic performance or fail to graduate; 2) there has been a misrepresentation in the application process; 3) we learn that you have engaged in behavior prior to the first day of enrolled attendance that indicates a serious lack of judgment or integrity; 4) you alter your class/course schedule without prior approval from the Office of **Undergraduate** Admission; or 5) you are holding a place, past May 1, in the freshman class of a college other than Stanford. Further. Stanford reserves the right to require the applicant to provide additional information (and/or authorization for the release of information) about any such matter. Stanford also reserves the right in perpetuity to investigate the authenticity, accuracy, and authorship of materials submitted, information provided. and assertions made in connection with the application.

I certify that the information submitted in these application materials is current, complete and correct, and is my own work. I further understand and agree to the terms of the Stanford application instructions as posted at admission.stanford.edu, or as stated above, including Stanford's policies on the submission of the credentials noted above.

Mobile Phone Contact

I understand that those involved in the Stanford admission process may need to contact me at a mobile number provided in the Common App. **CONSENT TO PRIVACY POLICY By submitting** this application, I hereby consent to Stanford University's collection and processing of any sensitive personal data contained in my application to evaluate my application for the other purposes described in Stanford **University's Online Privacy, Offline Privacy** Policy, and the Privacy **Notice for Admissions** and Financial Aid which can be found at privacy.stanford.edu.

I hereby consent to Stanford University's collection and processing of any sensitive personal data contained in my application.

Affirmations

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