

## Languages

- Mandarin Chinese: intermediate proficiency
- Hindi: native proficiency
- English: native proficiency

## </Languages>

- HTML, CSS, JavaScript, PHP, Typescript (Web Development)
  - Bootstrap, JQuery, BabylonJS, TensorflowJS
- Python (Scripting, APIs, Machine Learning)
  - Matplotlib, Tensorflow, Numpy, Pandas
- Java (Control, Scripting, Graphics)
  - Graphics2D
- C++ (Control, Scripting)
  - LVGL

## Awards/Honors

- World championship Inspirational All-Star Award (2022)
- Vex Robotics 2024 National Quarterfinalist.
- 17x regional, state, and national level Vex Robotics trophies.
- FRC Team Sustainability Award
- 2x FRC District Engineering Inspiration Award.
- 2x General Motors Industrial Design Award.
- 2<sup>nd</sup> Ranked Extemporaneous speaker in Texas District Tournament.
- 4x NSDA Nationals qualifier.
- Guest Speaker at Vex Robotics World Championship.
- Industry Talk host at Autodesk University 2023.
- Ambition Accelerator Best Voted Idea (2023). “Inspirational” - Mark King (Taco Bell CEO)
- Houston Resilience Design Challenge Prize Winner.
- Veterans’ Pin Design Challenge Finalist.
- Vex State Championship Amaze Award.
- National Merit Scholarship Winner.
- Rice Elite Tech Camp scholarship recipient.
- FRC Gracious Professionalism Award
- FRC Engineering Inspiration Award
- IPPT Test Gold award.
- SAF Marksmanship award.
- SAF BMTC Best Company award.
- Worldwide Taekwondo Open Poomsae Championships Gold Medallist.
- Taekwondo Black Belt and Jyokyonim (junior instructor).
- Winner of CCZJV Arts Contest.
- “Superior” Rating at Texas Thespians Competition.
- Induction to International Thespians Honour Society.
- IB Diploma Graduate.
- Rise Scholarship Program Finalist.
- West Houston Leadership Summit nominee & attendee.
- Schoolhouse.World physics and SAT certification.
- National Honours Society member.
- 1500 SAT Superscore

# SOUMIL GOYAL

An interdisciplinarity-minded, experienced, and accomplished student

## Jobs/Internships

- Singapore Armed Forces (2024-Present): serve the nation as an Officer Cadet Trainee. Will commission in June 2025 as Lieutenant Logistics Officer and Platoon Commander.
- ION Houston; intern, CNC Specialist (2022-2024): work to maintain the ION Prototyping Lab’s equipment, develop new facilities, and coordinate the completion of needed tasks.
- Steps for Dancing; web designer/developer (2018-Present): created a custom-coded website for SFD from scratch. Still regularly maintain, update, and grow the company web-presence. Also involved in digital & physical marketing.
- Dwayne Publishing; web designer/developer (2023-2024): created a custom website for author D Wayne and continue to maintain his web presence.

## Projects

- Robust Adaptive Network; founder/president: invented a system of drones and rovers to save lives in natural disaster, found thousands of dollars of resources for the invention, and continue to develop this robotic project.
- Pedal Power; founder/president: invented a project that charges students’ devices by pedalling a bicycle. Received a grant to complete the project and implemented the public project in my school successfully.
- Publications: work with industry professionals to publish engineering research material following ISBN, API, ISO, ASME, ASTM guidelines.
- Champion Cubers; founder/president: created my own business from scratch to teach local children how to speed-solve the Rubik’s Cube in exchange for a fee.
- Screen Salvagers; founder/president: collected 400+ lbs (180+ kg) of waste polymethyl methacrylate (PMMA) and reused it in structural robotics & engineering education applications.

## Experience

### Robotics

- Vex Robotics; captain: developed and led 9 teams of 30+ members to design, build, program, and practice with robots that compete at an international level. Founded 2 teams from scratch.
- FIRST Robotics, captain: lead a team of 40+ students across 6+ schools to design, build, and program an industry-level robot to compete at the state and national level.
- Combat Robotics, lead: direct about 10 people to collaborate and craft open-sport, professional combat robots.

### Communications/Debate

- Speeches: I have given speeches, industry talks, and lectures at very high levels including the General Consulate of India, the Vex Robotics World Championships, and the Autodesk University.
- Competition Debate Team; captain: mentored and lead a high-level, competitive debate team to national-level competitions in NSDA, TXFA, UIL, and HUDL speech & debate competitions.
- Honours Debate Course.

## Engineering

- Design Challenges: participated in many competitive design challenges including ones hosted by Future Engineers, Printables, National Wildlife Federation.
- Autodesk University; industry talk: selected (and some others) amongst thousands of applicants from professionals, CEO’s, businesses, etc. to give an industry talk at one of the biggest engineering conferences.
- 2024 TinkerCAD Summit special guest.
- IB HL Physics course, IB HL AA Mathematics course, Principles of Engineering & Design course, Fusion 360 Certified User, OSHA General Industry Safety Certification

## Computer Science

- Computer Science Honors Society; officer: manage and mentor 50+ members involving community service, competitions, projects, and workshops.
- Web Development
  - Steps For Dancing Website <https://www.stepsfordancing.org>
  - Champion Cubers website <https://championcubers.soumilgoyal.com>
  - Personal Portfolio Website <https://www.soumilgoyal.com>
  - 3D Game Website <https://game.soumilgoyal.com>
  - Freshman User Guide Website <https://freshman-user-guide.soumilgoyal.com/>
  - Dwayne Publishing: <https://www.dwaynepublishing.com>
- Cybersecurity; club officer: manage 10+ members in activities, lessons, and events.
- IB Computer Science 2 course.

## Athletics

- Swimming: competed up to a state-level and continue to practice as a hobby.
- Soccer: compete in a local club as a midfielder.
- Taekwondo: compete in World Taekwondo competitions and lead 5-10 team members in a traditional-style school.

## Arts

- International Thespian Honour Society; officer: project-managed play productions and team rehearsals amongst ~50 members.
- Visual Arts: Self practiced hobby in both digital and physical forms. Used this skill to create marketing posters, web-designs, and book covers.
- Speeches: performed competitive (impromptu and prepared) speeches in 3 different languages.

## Community Service

- <https://soumilgoyal.com/#community-service-log>