

EDUCATION

School: Brighton College, United Kingdom; Woodstock School, India Grade 11 & 12: A-Level Grade 9 & 10: IB MYP Grade 11-12 Subjects: Physics, Mathematics, Further Mathematics, Economics, Extended Project Qualification	Grades: Predicted 5 A* SAT (attempts - 1): Total: 1540 Math: 800, Critical Reading: 740 IELTS: Total: 8.5 Reading: 9, Listening: 9, Speaking: 7, Writing: 8
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ACADEMIC AWARDS & HONORS

<i>National & International</i>	
Senior Math Challenge: Won Gold medal.	2024
British Physics Olympiad Round 1: Received Silver Certificate.	2024
Winner, Gold CREST Award: Recognized for research on graphene as an additive to decking, put in 100 hours of work.	2024
Sir Isaac Newton Exam (high school physics test set by the University of Waterloo): Placed in the top 33% globally.	2024
Finalist, John Locke Essay Competition: Placed in the top 16.9% of 30,000 contestants.	2024
Finalist, Northeastern essay writing competition: Placed in the top 12% of 4500+ contestants.	2023
<i>School</i>	
Headmaster's Award, Brighton College: Received recognition for consistent academic excellence in a class of 250.	2024
Silver Certificate, Brighton College: Received 6 distinctions in economics, 3 in mathematics, & 8 in school contributions.	2024
Best Student Award in Math (Extended & Standard) & Design, Woodstock School: Received 7's throughout the year.	2023
Best Effort Award, Brighton College: Received for continuous hard work & consistent class participation, from a class of 250.	2023

LEADERSHIP POSITIONS

School Prefect, Brighton College <ul style="list-style-type: none">Acted as the face of the school for visitors & parents, touring prospective families & presenting in All-School Chapel.Coordinated with school to segregate food-waste & analyze food-waste patterns to understand ways to minimize this wastage.Working with food banks to utilize excess food in school canteens.	2024 - Present
House Green Prefect, Brighton College <ul style="list-style-type: none">Helped make my house more sustainable & promote environmental-friendliness, by helping organize Make a Difference Day & leading a team to cut down invasive weeds in primary school gardens.	2024 - Present
CEO, House Entrepreneurship Challenge, Brighton College (Elected from 19 students) <ul style="list-style-type: none">Made & pitched a business plan for an ultrasound insect repellent; devised market strategy, cash flow forecast, product design.	2023
Dorm President, Ridgewood, Student Council Body, Woodstock School <ul style="list-style-type: none">Worked to create a safe, supportive, & inclusive environment in the dorm of 150+ students.Allocated 'buddies', organized the Ridgewood Carnival, hosted weekly Saturday Tournaments, arranged bonfire & movie nights.	2021-2022
President, Debate Club- Woodstock School; Debater- Brighton College, Speech Debate India <ul style="list-style-type: none">Led a debate club of 25 students (grades 6-11), heading the team in national competitions (eg. Slater Debate Tournament).Organized meetings, taught debating strategies., planned impromptu debates, held feedback sessions.As a part of the Brighton College Senior debating team, participated in 3 inter-school competitions (including the South Hampstead Schools Debating Competition- largest one in the UK with 150+ schools).As part of the Speech Debate India debating team, took part in 5 international competitions & judged the Stanford Invitational.	2020 - Present

ENERGY LITERACY DRIVE

Course Developer, Energy Literacy Course (certified by Brighton College) <ul style="list-style-type: none">Designed a multilingual course with intermediate & advanced levels to enhance energy understanding & promote sustainability.Spread awareness about the course through social media, publishing in school newsletter, & presenting in All-School Chapel.Link to the course: https://energy-literacy-awareness.b12sites.com/index.Link to Instagram page: https://tinyurl.com/54pta82f.	2024 - Present
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ENGINEERING EXPERIENCES & RESEARCH

<i>Research</i>	
Researcher, Extended Project Qualification (EPQ) <ul style="list-style-type: none">Analyzed the current solutions to reduce space debris, researched whether a better solution exists; read scientific journals.Concluded that a better solution may involve a combination of solutions proposed, to capture various types of debris.	2024 - Present
Intern/Researcher, under mentorship of Liam Britnell (Co-founder & CTO), Vector Homes <ul style="list-style-type: none">Used 3D modeling, simulation, & experimental techniques to make commercial decking more sustainable.Simulated effects of dimensional & material property changes (e.g., Young's Modulus) on maximum deflections; conducted physical tests to measure real-life outcomes.Wrote a research report about the impact of graphene on the strength of decking & received the Gold CREST Award for it.Link to the report: https://tinyurl.com/6sjvtem.	2024
<i>Innovation</i>	
Researcher/Engineer, Created dust collection device (Link to the report: https://tinyurl.com/mva8nmby) <ul style="list-style-type: none">Researched & evaluated the use of existing dust collection devices in stone-processing factories to minimize risk of silicosis & promote workers' occupational health & safety.Developed an effective dust collection device; will share with manufacturers for wider industry application.Presented the report in the ICFAMEAD-2024; it will be published in the ES Publisher journal.	2023 - 2024
<i>Internships & Observations</i>	

Observation at Shri Bhagwati Machines Pvt Ltd, Hero MotoCorp, Toyota Gosei Minda <ul style="list-style-type: none"> Shadowed the factory managers. Learned about manufacturing processes such as die casting, extrusion, tumbling, etc. Understood the overlap between leadership, entrepreneurship, industrial engineering, & mechanical engineering. 	2024
Internship, World of Stones (WoS) <ul style="list-style-type: none"> Shadowed Head of Maintenance at WoS. Learned the workings of machines (such as CNC, block cutting & polishing machines) & of their components. 	2023

COMMUNITY SERVICE

Co-Founder, Utopia- Non-Profit Organization to improve students' holistic development in rural schools around Kota <ul style="list-style-type: none"> Initiated parent-teacher meetings; addressed issues such as school attendance & COVID awareness; installed concrete water tanks to prevent theft; organized Sports Days with a fitness expert; distributed school supplies; held tree plantation drives. Demonstrated science experiments to boost interest in STEM; set up debate & photography clubs in multiple schools to promote enrichment activities; hosted interschool debate competition. The principal of the school we were working with requested the State Education Officers to initiate such extracurricular opportunities in all government schools across the State of Rajasthan, citing Utopia's exemplary work. Link to Instagram page: https://rb.gy/6hb32z. 	2020 - Present
Peer Tutor, Woodstock School & Brighton College <ul style="list-style-type: none"> Taught 12 students (from grades 6 to 12) science, math, & humanities. Gave tips on time management, answering strategies, & essay structure; used visual aids for better understanding. 	2020 - Present
Member, National Honor Society <ul style="list-style-type: none"> Appointed from a class of 60; assisted school with events such as basketball tournaments & Parent-Teacher Conferences. 	2022 - 2023

STEM PURSUITS

President, UK Space Settlement Design Club, Brighton College <ul style="list-style-type: none"> Founded the UKSDC club, a continuation of the Space Settlement Design Club at Woodstock. Formed & led a team of 13 students from grades 10-12 to participate in the UK Space Settlement Design Competition. Elected team leader in the regional round of a group of 60 students, when grouped with various schools. 	2023 - Present
Editor, Hubble STEM Magazine, Woodstock School & 'From Stardust To...' STEM Magazine, Brighton College <ul style="list-style-type: none"> Wrote & edited 10+ articles for the magazine/bi-monthly newsletters on topics such as the solved mysteries about our planet. Organized an international competition that aimed to promote passion for STEM. Suggested ways to expand the size & reach of the magazine by planning activities like environment week. 	2022 - Present
Finalist, Space Station Technology Challenge <ul style="list-style-type: none"> Proposed testing 3D-printed carbon nanotubes on the space station, hypothesizing their advantage in radiation shielding. 	2024
Participant, ISSET Mission Discovery <ul style="list-style-type: none"> Proposed testing dilatant fluids as structural dampers on the ISS, mentored by astronaut Steven Swanson. 	2024
Vice-CEO of school team, Asian Regional Space Settlement Design Competition, Woodstock School <ul style="list-style-type: none"> Assisted CEO in leading the team of 20 students. Worked with the team to develop collaboration & coordination skills. Managed timeline by setting realistic deadlines, making action plans, & discussing with the team. 	2022 - 2023
Vice President of Engineering, Indian Space Settlement Design Competition national round team 'Rockdonnell' <ul style="list-style-type: none"> Led a team of 60 (with students from 3 schools) to the position of runners up in the national round. Designed a space settlement, resolving internal conflicts, & developing trust & collaboration. 	2022
Website Developer <ul style="list-style-type: none"> Developed a website to share STEM knowledge, discoveries, & updates. Article topics include analyzing James Webb & Hubble telescope designs, & concepts like dark matter & energy. 	2022 - 2023

ONLINE COURSES & TECHNOLOGY PURSUITS

AI Scholars, InSpirit AI <ul style="list-style-type: none"> Learned about neural networks, regression models, & applications of AI in ethics & finance. Developed a model to detect exoplanets with 99% accuracy, minimizing false negatives; won the best presentation award. 	2024
Six Sigma Green Belt Specialization, Kennesaw State University, Coursera <ul style="list-style-type: none"> Learned how to minimize inefficiencies in industrial processes, completing a capstone project to apply the learnings. 	2023
Introduction to Engineering Mechanics, Georgia Institute of Technology, Coursera <ul style="list-style-type: none"> Learned how to analyze static equilibrium models, using force analysis, free-body diagrams, & moments. 	2023

MUSIC, SPORTS, & OTHER EXTRACURRICULAR ACTIVITIES

Awardee (to be), Duke of Edinburgh Gold, Brighton College <ul style="list-style-type: none"> Completed the physical, skill, expedition, & residential sections of the program. Working as a member of the Youth Advisory Board to prevent gambling harms, to complete the volunteering section by Feb '25. 	2023 - Present
Player, Kota Basketball Team, Brighton College & Woodstock School Basketball Teams <ul style="list-style-type: none"> Represented my home town in a regional basketball tournament & won the tournament. Regularly represent my school in regional matches. 	2022 - Present
Flutist, Advanced Band, Woodstock School & Concert Band, Brighton College <ul style="list-style-type: none"> Played the flute for 5 years at Woodstock School (Advanced Band). Performed 5+ solos & duets; played as accompaniments in the All-School Chapel. Continued to play at Brighton College in the Concert Band, & performing in All-School Concerts. 	2018 - Present