

Krish Sharma

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EDUCATION

Tanglin Trust School, Singapore

2015 - Present

- *International baccalaureate Diploma Program Grade 12*

STANDARDIZED TESTS

• **SAT Test: Total – 1550; Math – 800; English – 750**

2022- 2023

ACADEMIC HONOURS AND AWARDS

- Co-Topper in School IGCSE board exams; Achieved best possible grades in all subjects- 4 A* and 7 9's 2022
- Pearson Outstanding learner Award for Highest mark in country (Singapore) in IGCSE Physics board exam 2022
- World Economics Cup Global Round: Individual global rank 1 in Fundamentals, Individual aggregate Silver Award, Team placed Third globally 2023
- World Economics Cup Continental Round: Team Award- second in Asia - Pacific, qualified for Global round 2023
- British Physics Olympiad Senior Gold Award 2022
- United Kingdom Mathematics Trust Challenge Senior Gold Awards – qualifying for Kangaroo Challenge 2022 & 2023
- Fermat Mathematics Contest Distinction 2022
- Singapore and Asian Schools Maths Olympiad Bronze Award (1st in School, 11th in Country) 2023

ECONOMICS AND ENERGY PURSUITS

Research:

Viability of diversified renewable energy sources – A Game Theoretic approach, Singapore

2023

Independent research, mentored by Cambridge PhD Student Adrian Chung

- Understood undergraduate to Masters level game theory and literature review involved in the designing of an energy game.
- Writing a paper entitled, “Using a game theoretic approach to determine if the diversification of renewable energy is a viable solution to combat the renewable energy intermittency problem in rural and urban India.”
- The research paper is being sent for publishing to various International Journals.

Molecular Tunnel Junction Magnetic Spin Device (MTJMSD) Monte Carlo Simulations – Remote

2023 - Present

Center for Nanotechnology Research and Education (CRNE) University of the District of Columbia

Worked under Professor Pawan Tyagi and his PhD Student Uzma Amir

- Learned operation of Monte Carlo Simulations for Molecular Tunnel Junction Magnetic Spin Devices, and underlying scientific theory.
- Ran Simulations to assist PhD student Uzma Amir with her research on the topic and to gain a better grasp of the simulation software.
- Looking to embark on independent research as part of Professor Tyagi's lab into the potential application of MTJMSD's in solar energy, with an addendum of the economic viability of the device.

Internships

Nimoto Solar Private Limited, Mumbai, India

2023

- Learned about working and installation of Solar Panels and various aspects of solar project plans, including shadow analysis and payback period calculations.
- Visited various solar panel sites in urban areas to observe maintenance process and grid electricity transmission.

E-Went, Mumbai, Kolkata, India, Singapore

2023

- Observed electric 2-wheeler manufacturing process within factory, how the factory keeps energy consumption at a minimum.
- Understood both energy and cost efficiency of electric 2-wheelers, as compared to regular vehicles.

- Attended pitch calls from startups in various technology related sectors across the world including pipeline cleaning robots, air purification systems and energy efficient fan technology.
- Analyzed over 150 startups recommended by Company AI to see if they were within the scope of the company.

SUSTAINABILITY OUTREACH PROGRAM

The Cycle ReCycle, Singapore, (<https://www.thecyclerecycle.com/>)

2022 - Present

- Organize donation drives of pre-loved bicycles, collecting over 200 bicycles till date.
- Fix bicycles individually at first, then work with local bicycle shops to fix rest of the workable bicycles observing magnitude of project.
- Donate adult bicycles directly to migrant workers in Singapore, and children's bicycles to The Salvation Army, who then distribute the cycles to low-income households in and around Singapore.
- Awarded the Diedre Lew Service award, with maximum grant to complete the project.
- Extended the initiative to a student led organization/club in school now including 20 + students for further expansion and outreach.

Tanglin Trust School Solar Energy Proposal

2023 - Present

- Using knowledge gained from an internship at a Solar panel firm, created a solar panel proposal for the school, emphasizing both economic and environmental benefits. Will help reduce the carbon footprint of the school while reducing the expenditure.
- Proposal to be presented to School's finance and facilities teams for further review and potential implementation.

Energy Literacy – A guide for children of the modern world

2023 - Present

- Researched energy literacy topics and methods to create a guide for young students aged 7-12 years old.
- In process for implementation into curriculum/teaching in various international schools in Singapore.

SCHOOL LEADERSHIP

Founder and President of Maths Competition Club, Singapore

2022 - Present

- Created the club noticing a lack of opportunities for younger students with an interest in academic competitions in STEM.
- Grew the CCA to over 25 members across Years 9, 10 and 11 in one term, Taught students how to solve various types of Olympiad problems.
- Actively working to create an in-school mathematics competition for younger students to provide them with further opportunities.

House Captain, Singapore

2022 - Present

- Selected as House Captain of Winchester House.
- Responsible for organizing and helping with in-house events including house days and the charity fun run.

Deputy Secretary General of Model United Nations, Singapore

2022 - Present

- Lead sessions for UPMUN – year groups 10, 11, 12 and 13. Designed various resolutions to provoke interesting debate
- Master of Chairs for upcoming MYTMUN conference in school.
- Attended over 7 conferences in all.

ECONOMICS RESEARCH AND EXPERIENCES

IIT Bombay SJM School of Management, Mumbai, India

2023 - Present

Summer Intern under Professor Sarthak Gaurav

- Writing a research paper entitled, "Tipping behavior in Ola and Uber, a weather, trust, and moral analysis."
- Learning about survey and experiment design to create surveys with an intended audience of over 10,000 people.
- Learning about various computational data analysis methods to analyze data collected through surveys and experiments.

Extended Essay, Singapore

2023 - Present

- Writing an extended essay at the confluence of economics and mathematics entitled, “To what extent do the assumptions and limitations of the Black-Scholes and Bachelier models impact their accuracy in different historical market conditions?”


Young Researchers for Social Impact, Remote, India

2023

- Co-Authored a research paper entitled, “Leveraging technology for social impact: Enhancing interventions for Women’s empowerment in rural India.”

- Findings of paper presented to partner organization (The Nudge Institute), who will be using our recommendations to conduct interventions.

Online Courses

Game Theory, final grade of 95.5% in 8-week online course, Stanford University. 

2023

Social and Economic Networks: Models and Analysis, final grade of 93.2% in 8-week online course, Stanford University.

2023

EXTRACURRICULAR ACTIVITIES

- SEASAC Basketball – Selected for 2-day competition in Thailand to represent School 2019-2023
- Economics Society 2022-2023
- STEM Club 2022-2023
- Robopreneur – Designed Python coding class for 7–10-year-olds 2022
- Internship at HN Reliance foundation hospital, Paediatric CVTS department 2022

LANGUAGES

- Fluent in English and Hindi
- Semi-proficient in Mandarin and Spanish