

Krshay Venkatesan

National-level athlete and aspiring mechatronics engineer

Chennai, Tamil Nadu

+91 9345957855

krshayv@gmail.com

Skills

Mechanical Engineering and Robotics, Computer Science and Data Analysis, Public Speaking and Debate, Disciplined and Focused Athlete

Projects and Research

2025 - 2026

Composite Materials Adoption Study

- Applied PLS-SEM multivariate regression analysis to study adoption of composites in Aerospace and Automotive industries.
- Accepted to IEEE I2ITCON conference for presentation.

2024 - 2025

Molten Salt Reactor Feasibility Study

- Research paper on evaluating the feasibility of MSRs in order to achieve India's 2070 Net-Zero goal. Mentored by Dr. George Anwar (UC Berkeley).
- Accepted to Princeton Journal for Interdisciplinary Research for publication.

2025

Sensor-Based ACL Rehabilitation Knee Sleeve

- Designed an IMU-based embedded system to quantify recovery metrics for ACL rehabilitation.
- Accepted to YSJ Vanderbilt (Young Scientist Journal) with minor revisions and awarded the CREST Gold Award

ONGOING

Chassis Vibration Analysis in Emergency Medical Vehicles

- Analysing chassis vibrations in emergency medical vehicles in a research internship with Rambal Pvt. Ltd.
- Mentored by a VIT Mechatronics PhD researcher

2025-2026

Mechanical Spoon for Parkinson's Disease

- Designed and structurally analysed a mechanical spoon to reduce eating tremors for individuals with Parkinson's Disease
- Mentored by IISc researcher
- Submitted and accepted to OJSS (The Oxford Journal of Student Scholarship)

ONGOING

AI Toolkit for Application-Based Learning

- Designing an application-based AI and future technologies course helping low and middle income students stay relevant
- Planning to deploy in partnership with 1M1B (activate1m1b.org) across NE India, with a pilot session completed at Young Scholar's Academy, Bangalore

ONGOING

Re-Spectable

- Founder of non-profit *Re-Spectable*, working to provide spectacles to underprivileged people (<https://re-spectable.org/>)
- In partnership with VHS Chennai (<https://vhschennai.org/>)
- Expanding to different cities around India in partnership with other like-minded students

Sports

PRESENT

Cricket

- Aspiring professional cricketer; Tamil Nadu U14 & U16 State Probables; TNCA 4th Division League.
- Winner of multiple POTM and tournament MVP awards over a period of 6 years
- Training 16–17 hours per week

PRESENT

Athletics

- Best Athlete U17 at ISSO Nationals 2025, winning two golds and one silver (1500m, 3000m and 800m respectively); Represented India at ISF Bahrain (affiliated to the International Olympic Committee)
- Represented ISSO at SGFI Nationals 2024 and 2025

Education

KC High International School, Chennai - IB Diploma Programme (IB)

SAT: 1570/1600 | PSAT: 1440/1440 | IGCSE: 9 A* | AP: Calculus BC (5), Computer Science A (5) | IB1 - 43/45 | TOEFL 6.0/6.0

Coursework: Engineering Mechanics (Georgia Tech), Thermodynamics (Univ. of Michigan), Aerospace (IIT Madras), Zero to Hero Python Bootcamp (Udemy), Arduino Intermediate Course, Quantum Computing Basics.

Internships

Research Internship at the CESSA (Centre of Excellence in Sports Science and Analytics), an IIT Madras startup (completed, 50 hrs)

Research Internship at Rambal Private Limited (ongoing)

Internship at Harmony Musicals (completed)

Awards

Asian International Mathematics Olympiad (AIMO) - Gold Medalist

Hong Kong International Mathematics Olympiad (HKIMO) - Gold Medalist

Canadian Computing Contest 2026 - Distinction

World Scholar's Cup - 13th in the World (Overall)

AMC 10 2024 - Highest Score (School)

CEMC Pascal 2024 - Distinction

Avogadro Chemistry Exam 2026 - Distinction

Sir Isaac Newton Physics Exam 2026 - Distinction

Infinity Maths Competition 2024 - India South Zone Runner-Up

AP Scholar Award

Trinity Communication Grades 1-7 - Distinction