

Rohan Dhameja

34331 Windsong Ter, Fremont, CA 94555 ♦ rdhameja09@gmail.com ♦ 510.943.4099 ♦ <https://github.com/RohanDhameja>

Aspiring computer scientist with a strong interest in AI, robotics, and computational mathematics. Seeking opportunities to contribute to innovative projects and research that drive meaningful impact in technology.

EDUCATION

Bellarmino College Preparatory, San Jose, CA

Expected Jun 2027 graduation

- **GPA:** 4.0 (Cumulative Unweighted) | 4.38 (Weighted)
- **SAT:** 1530 (780 Math | 750 Reading and Writing)
- **AP Courses:** 3 courses taken
- **Relevant Coursework:** AP Calc AB, AP Chemistry, AP World History, Computer Science Principles, Latin 3, English-II

RESEARCH

Research Topic - *Hybrid Methodologies for Polynomial Diophantine Equations.*

Sep 2024 - Present

Mentor - Mr. Shashank Sahu, Physicist, IIT Kanpur

Objective - This study aims to develop innovative algorithms to solve higher-degree Diophantine equations by integrating algebraic number theory, modular arithmetic, and lattice basis reduction, improving accuracy and computational efficiency.

My Role

- Conducted a comprehensive survey of existing studies and methods in the field to build a strong foundation.
- Studying the proposed algorithm and developing a program to test and experiment with it.
- Contributing ideas to refine and enhance the algorithm for better performance.

EXTRACURRICULARS

Software Developer, FIRST Robotics Competition, Team #254, San Jose

Aug 2023 – Present

- Dedicate 20+ hours weekly collaborating with teammates to develop and debug software, enhancing robot functionality through data visualization and accurate target identification at various angles in preparation for competitive tournaments

Member, Bellarmino ML Club

Aug 2024 – Present

- Actively engaging in machine learning projects and collaborative exploration of real-world applications of ML.

Member, USACO Club

Aug 2024 – Present

- Participating in coding competitions and training sessions to improve competitive programming skills for the USA Computing Olympiad (USACO).

Pianist (10+ years) / Sitarist (4+ years)

- Grade 5 ABRSM, performed for elderly community members, fostering connection through music.

INITIATIVES

Chapter Director Finance Forest (FinanceForest.org)

Jul 2024 – Present

- Leading financial literacy programs for underserved youth.

Founder and President, Inclusive Heart (501(c)(3) non profit org)

Oct 2023 – Present

- Founded a nonprofit to promote autism awareness through creative mediums like comic strips.
- Leading initiatives, managing volunteers, organizing events, and building the website to foster inclusivity for the special needs community.

Co-Founder Badminton Club, Bellarmine College Preparatory

Aug 2023 – Present

- Organize activities promoting teamwork and fitness.

Co-Founder Autism Awareness Affinity Club, Bellarmine College Preparatory

Sep 2024 – Present

- Leading awareness initiatives and events.

HONORS & COMMUNITY SERVICE

AMC 8 - Excellent score, showcasing strong mathematical aptitude and problem-solving skills.

Congressional App Challenge Participant | 2024 - Developed "ServeSmart," a web app aimed at enhancing strategic decision-making for badminton players to improve mental preparation and performance.

FIRST Robotics Competition, Team #254

- **Winners** - 2024 Sacramento Regional, 2024 East Bay Regional, 2024 Newton Division
- Ranked 4th at the World Championship and recipient of the **Excellence in Engineering Award**.

Gold President's Volunteer Service Award | 2024

Recognized for 100+ hours of service with various community organizations, including:

- *InclusiveWorld.org*: Teaching Python programming and web app development to special needs individuals to promote inclusivity in technology education.
- *SpiritCare Ministry to Seniors*: Performed piano pieces for elderly community members, fostering connection through music.