Roshan Taneja

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Community and Research Awards

○ NeurIPS Winner: ML for Social Impact **2024**
○ President's Volunteer Service Award, Gold Medal **2024**
○ Melvin Jones International Humanitarian Services Award **2024**
○ Nominee, International Children's Peace Prize **2024**
○ Next Generation Foresight Practitioner Youth Voices UN SDG #6 Award **2023**

Academic Excellence Awards

○ Computer Science Department Honor **2025**
○ Excellence in Fundamentalism **2025**
○ Excellence in AP Physics C **2025**
○ AP Scholar with Distinction **2024**
○ Excellence in AP English Lang **2024**
○ Rotary Computer Science Award **2023**
○ Excellence in Spanish **2023**
○ Robotics Regionals **2023, 2024, 2025**

Leadership

○ Youth President, Maji Wells **2021–Present**
○ President/Spirit Chair, SHP **2023–2025**
○ Co-founder, Improv Club, SHP **2022–2025**
○ Lead, Robotics Club, SHP **2022–2025**

Recognized & Featured

○ Featured: Harvard Spatial Data Lab **2024**
○ Sacred Heart Magazine **2024**
○ MDCON24, Multi-District East Africa Conference **2023**

Socials

🌐 roshan.codes
🔗 github.com/roshantaneja
🔗 linkedin.com/in/roshan-taneja
🔗 roshantaneja.stck.me

Education

Electrical Engineering & Computer Science @ *UC Berkeley* **2025–Present**

High School Diploma @ *Sacred Heart Preparatory, Atherton* **2022–2025**
○ GPA: 3.97–ACT: 36
○ AP: Calc BC, Phys 1, CompSci A, Macro, Micro, Phys C, Eng Lang, Eng Lit, Spanish
○ Post-AP: Advanced Math, Advanced Computer Science, Machine Learning, Senior Honors Independent Study

Spatial Research Certificate @ *Harvard GIS Institute* **Spring 2025**

Intermediate Data Science @ *UCLA CSSI* **Summer 2024**

Introduction to Climate Science @ *UC Berkeley* **Summer 2024**

Remote Sensing @ *MIT Beaver Works* **Spring 2024**

Data Structures and Algorithms @ *John Hopkins CTY* **Summer 2023**

Global Mathematics @ *Duke University Summer* **Summer 2022**

Projects, Volunteering, & Work Experience

Youth President, Water Programs @ *Maji Wells* **2021–Present**
○ Reduced need for women to walk for water from 9 hrs per day to 2 hrs/day by fundraising over $100K and deploying 100 rainwater harvesting units over four years; Helps 10,000 Maasai in Monduli, TZ. Led a team of 10 students to conduct on-ground research published.

Research Intern @ *Harvard University* **Fall 2024–Summer 2025**
○ Working with Prof. Wang in the Center for Geographic Analysis to expand use cases for placement of water harvesting units using satellite imagery & machine learning for Maasai in Tanzania.

Class Officer @ *Sacred Heart Preparatory* **2023–2025**
○ As 1 of 6 officers, Junior & Senior yr, planned and executed 25 events; Introduced three new events across 500+ students that became recurring traditions.

Engineering Intern @ *Fluxon Apps* **Summer 2023**
○ Built typescript tool to automate previously manual billing for employees. Saved 2000 annual man-hrs; first intern for the company.

Sales and Mechanic @ *Calabas Cyclery* **Summer 2022**
○ Sold bicycles worth $15K, digitized floor inventory, fixed bikes, and managed check-out counter; Upgraded website and social media accounts with more high-resolution pictures, online catalog, video posting.

Publications, Patents & Academic Conferences

Presenter: NeurIPS 2024 Winner "Machine Learning 4 Social Impact" 2024
○ 1 of 4 Winners from 330 global entries, 14,000 attendees.

Patent Pending, Publication: Object Detection in Satellite Imagery for Optimizing the Placement of Rainwater Units 2024
○ US Patent Pending 63/703,232. Published in NHSJS.

Presenter: Machine Learning 4 Earth Observation Conference @ *The University of Exeter, UK* 2024

Publication: Assessing the Impact of Rainwater Harvesting on 4500+ Maasai 2024
○ Published in NHSJS.

Short Story: "Pomegranates" 2024
○ Published in The Ravens Perch, PALM, Beyond Words Magazine, Part of current Junior Year AP English Language Curriculum at SHP.

Presenter: MDCON23, Multi-District East Africa Conference @ *Lions International, Tanzania* 2023
○ Audience of over 600 international members from across East Africa.