

RISHIT GUPTA

Pleasanton, CA 94588 • (408) 960-3192 • rishit56700@gmail.com

EXPERIENCE

Researcher, UT Austin

June 2024 - September 2024

Discovered polyethylene and lead shielding to be the optimal material for nuclear fission powered aircraft

- Researched hydrogen-based material efficacy in aviation to design safe/sustainable nuclear shielding structures
- Simulated nuclear fusion reactions on Open MC to analyze the radiation emitted for each layer of shielding
- Published research findings to inform nuclear and aerospace engineers on sustainable propulsion alternatives

President & Founder, TechCore — Pleasanton, CA

January 2024 - Present

Non profit initiative striving to reduce the digital divide in education through tech donations and programming classes

- Hosted summer and fall python programming classes to teach 55 beginner & advanced students coding
- Fundraised and collected laptops to donate to underserved schools, enhancing students access to technology

Web Developer, Sport Injury Bio Club Pleasanton, CA

July 2024 - August 2024

- Developed a React web app for club members to publish sports injury blogs to share learnings with the community
- Designed an integrated dashboard with tools for a seamless user experience resulting in six publications to the app

Full Stack Developer, Fremont Youth Commision Fremont, CA

September 2024 - October 2024

- Created a React web app for club members to manage their club operations, and enhancing the clubs outreach.
- Created a admin dashboard with tools to efficiently manage members, add partnerships, and create events.

ACTIVITIES

Python Tutor, Ace Coding – Pleasanton, CA

October 2023 - March 2024

- Taught 6-8th grade students how to develop games in Python to expose them to computer programming skills
- Created a weekly curriculum with problems and fundamental coding topics to challenge/instruct students
- Debugged student code for logical and syntax errors to identify areas of improvement and address mistakes

Financial Literacy Content Creator, Devtrex – Pleasanton, CA

November 2023 - March 2024

- Published videos on financial literacy, management, and marketing tactics to share my interests and educate others
- Created a curriculum with slideshows for each topic, providing a lesson and a real life implication of each topic.

Mechanical Team Engineer, Amador UAV's: Hover Game – Pleasanton, CA

November 2022 - March 2023

- Engineered a drone to carry a 1kg payload of pesticides, which used sensors and cameras to detect infested plants.
- Drone deployed pesticides on infested plants to aid farmers in managing pest issues and enhance their crop yields.

EDUCATION

Amador Valley High School – Pleasanton CA, U.S.A

August 2022 - May 2025

Irvington High School - Fremont CA, U.S.A

August 2021 - June 2022

De Anza College - Cupertino, CA

July 2023 - December 2024

Ohlone College - Fremont, CA

July 2022 - August 2022

Higher Level Course Work - AP Computer Science A, AP Computer Science Principles, AP Calculus AB, AP Chemistry, AP Macroeconomics, AP US History, AP World History, AP Government, AP Physics C Mechanics, AP Physics C Electricity & Magnetism, AWS Machine Learning, Client-Side Prog with Javascript, Intro to Comp Prog Using Java

ADDITIONAL

- **Honors:** AP Scholar with Honor (2024) , Los Altos Hackathon Best Hack Award (2024)
- **Publications:** <https://doi.org/10.58445/rars.1683> (Modeling Shielding for Nuclear Fission Powered Aircrafts)
- **Technical Skills:** Python, Java, Javascript, React.JS, SQL, CAD, Cloud, AWS, Machine Learning, Open MC, Node.JS
- **Languages:** English, Hindi, Spanish