

Kavel Rao

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I'm a freshman at the University of Washington passionate about software and aerospace technology. I have experience delivering independently on projects and programming in Python, Java, C, and C++. I also have strong technical writing, presentation, and collaboration skills and enjoy teamwork and leading peer groups.

Education

- Expected graduation 2024 **University of Washington College of Engineering – Seattle, WA**
- Intended major: Computer Engineering
 - GPA: 3.98
 - Washington NASA Space Grant Scholar
- Graduated 2020 **Newport High School – Bellevue, WA**
- GPA: 4.00, 12 AP classes, ACT: 35, Graduated with honors

Skills

- Programming: Python, Java, C, C++, Javascript
- Web Development: Flask, Django, ExpressJS, MySQL
- Technical Communication: design reviews, presentations, technical reports

Experience

- Summer 2021 **Conversica: Software Engineer Intern**
- Delivering model components for AI assistants to power an augmented workforce
 - Testing, maintaining, and extending production codebases and pipelines
 - Collaborating with a team to create high impact and quality software
- 2020 – present **Husky Satellite Lab: Software Engineer**
- Enabling HuskySat-2 to map the lunar subsurface using ground penetrating radar in NASA's Artemis III mission (planned 2024)
 - Designing satellite attitude control system using reaction wheels
 - Programming integrated software systems on embedded systems microcontrollers using C and C++
- Fall 2020 **NASA L'Space Mission Concept Academy: Computer Engineer**
- Researched and wrote a Preliminary Design Review document for a lander mission to measure seismic activity on Saturn's moon Enceladus
 - Designed concepts for lander communication systems and hazard mitigation
- 2016 – 2020 **Newport High School Rocketry Club: President, Senior Mentor**
- Took club to Nationals in the American Rocketry Competition 2 years in a row by establishing repeatable engineering practices, fostering a culture of learning, and motivating team members
 - Set up structure of club, increased membership from 25 to 50 in 2 years
 - Spearheaded corporate engagement, resulting in funding of \$3000, including recurring annual \$1200 grant from local aerospace company

Awards and Achievements

- 2020 - First Place, The American Rocketry Competition Presentation Contest
- 2018 & 2019 - National Finalist, The American Rocketry Competition
- 2018 - Level 1 High Power Rocketry Certification to launch H through I class rocket motors
- 2019 - All-Northwest Honor Band 1st Trombone, National Association for Music Education
- 2016 - Shodan Black Belt (First Degree), Shotokan Karate