

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: 3.97
- Washington NASA Space Grant Scholar

Graduated 2020 **Newport High School – Bellevue, WA**

- Received high school diploma with honors
- GPA: 4.00, 12 AP classes, ACT: 35

Skills

- Programming: Python, Java (intermediate); C, C++ (beginner); Linux (beginner)
- Web Development: Flask, Django (intermediate), ExpressJS (beginner), MySQL (beginner)
- Technical Communication: Strong writer and presenter for professional documents and reports

Experience

2020 – present **Husky Satellite Lab: Software Engineer**

- Building integrated software systems and test platforms for HuskySat-2, lunar satellite in NASA's Artemis mission (planned 2024)
- Designing PID (proportional-integral-derivative) reaction wheels control system
- Programming embedded systems microcontrollers using C and C++
- Onboarded quickly after interview process through self-guided learning

2020 – present **HiScore Learning: Test Prep Teacher**

- Coach 2nd-5th grade students for standardized test prep
- Teach 2.5 hour, 25 student classes and communicate with parents
- Set up learning groups for optimal classroom experience

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 setting up good engineering practices
- Established 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

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| 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 |