### **Kavel Rao**

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

# <u>Experience</u>

2020 – present Husky Satellite Lab: Software Engineer

- Onboarded quickly after interview process through self-guided learning to begin 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++

2020 – present HiScore Learning: Test Prep Teacher

- Coach 2nd-5th grade students in gifted program entrance standardized test prep
- Teach 2.5 hour, 25 student classes and communicate with parents
- Create practice testing material

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
- Established structure of club, increased membership from 25 to 50 in 2 years
- Fundraised \$3000, including recurring annual \$1200 grant from Aerojet Rocketdyne
- Mentored new rocketeers and started middle school outreach programs

## **Awards and Achievements**

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

### Skills

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