# Shreyas Subramanian

Seattle, WA | US Citizen | +1 (425) 393-7186 | linkedin.com/in/shreyassubra/ | sshreyas2005@gmail.com

#### **EDUCATION**

Georgia Institute of Technology, Daniel Guggenheim School of Aerospace

Atlanta, Georgia

BS in Aerospace Engineering (First Year, Sophomore Academic Standing)

Expected May 2026

GPA: 4.00/4.00

Relevant Activities: GT Experimental Rocketry, GT School of Aerospace Student Advisory Council, GT AIAA, Yellow Jacket Flying Club, RotorJackets, GT India Club

### Bellevue College

Bellevue, Washington

GPA: 3.93/4.00 September 2019 - June 2023

# **Newport High School**

61 Credit Hours (Dual Enrollment)

GPA: 4.00/4.00

Bellevue, Washington September 2019 - June 2023

Relevant Activities: Student-Elected Associated Student Body Vice President, Newport Rocketry Lead, Link Crew Leader, Newport Band Percussionist, Varsity Cross Country and Track Runner

#### WORK EXPERIENCE

Research Assistant, Ben T. Zinn Combustion Laboratory, Atlanta, Georgia (8 hours/week)

January 2024 - Present

Working under Dr. Tim Lieuwen with a focus on researching ammonia as a possible alternative fuel for jet engines.

Engineering Intern, Textron Aviation, Wichita, Kansas (8 weeks, 20 hours/week)

June 2022 - July 2022

Textron Aviation is one of the largest general aviation manufacturers in the world, producing business jets, as well as turboprop and piston engine aircraft.

- Worked on full-scale static flight simulators in the systems test department; developed and maintained them for a variety of internal tests (e.g., human factors testing, emergency procedures development, firmware build testing).
- Calibrated wraparound visual systems using FlyElise to create cohesive, 180-degree images across multiple projections.
- Integrated open-source software (FlightGear APIs) with project-specific hardware (Arduino microcontrollers).
- Modeled and 3D printed microcontroller mounts.
- Scaled testing capacity and increased simulator uptime.

Range Engineering Intern, Pendleton Unmanned Aircraft System Range, Pendleton, Oregon (8 weeks, 40 hours/week) June 2021 - August 2021 Pendleton UAS Range is one of the premier UAS testing and rapid prototyping centers, helping its customers ensure FAA and airspace compliance.

- Shadowed test UAS performance operations conducted by Airbus, Prime Air, Rain Aero, and Insitu.
- Supported client missions by designing and setting up hardware (PCBs, flight controllers, batteries, etc.).
- Mapped visual flight aids using test materials and creating checkpoints for UAS.
- Developed a hinged battery cover for a client using SolidWorks and 3D printers.
- Increased overall customer testing throughput.

#### ADDITIONAL EXPERIENCE

Georgia Tech Experimental Rocketry, Avionics and Externals Team Member, Atlanta, Georgia

August 2023 - Present

Georgia Tech Experimental Rocketry aims to be the first collegiate team to launch a two-stage rocket to the edge of space.

- Used Python to create a data filtering module which reads raw serial data from onboard systems, cleans and uploads data to a SQL server database.
- Used Grafana to visualize data from SQL server and embedded the associated visual components into a GUI mission control application using PyQT.

#### Newport Rocketry Club, Member, Bellevue, Washington

June 2020 - July 2023

Newport Rocketry Club is my high school's competitive rocketry team competing in the American Rocketry Challenge. Designed rocket in accordance with competition requirements using simulation software (OpenRocket).

- CAD modeled (SolidWorks) and 3D printed various components of the rocket (nose cone, fins).
- Used linear regressions as well as statistical analysis to rapidly prototype our design and accurately mass our rocket for launch.

### HONORS AND AWARDS

## The American Rocketry Challenge, First Place, Chantilly, Virginia

May 2022

- The American Rocketry Challenge is the world's largest rocket contest with nearly 5,000 students nationwide competing each year.
- The contest gives middle and high school students the opportunity to design, build and launch model rockets.
- My team won the competition, representing Newport Rocketry Club, finished first among 723 other teams across the United States.

### International Rocketry Challenge, Second Place, London, United Kingdom

May 2022

- The International Rocketry Challenge (IRC) is the final competition between the best and biggest student rocketry competitions across the globe; it was formalized in 2015 and the current participating countries are France, United Kingdom, United States, and Japan with new countries applying to join each year.
- My team represented United States at the Farnborough International Air Show and placed second internationally.

### **SKILLS**

Hardware: Shop-trained Programming: Java, Python

Software: SolidWorks, MATLAB, Premiere Pro, Office 365

Licenses: FAA Part 107

Language: Native Fluency in English, Bilingual Fluency in Tamil, Limited Working Proficiency in Spanish