

ADARSH SHETH

tx.ag/adarsh | linkedin.com/in/adarsh-sheth | Bay Area, CA & College Station, TX

OBJECTIVE

Rising junior in Aerospace Engineering with hands-on experience with CAD, CFD, mission analysis, and systems integration, seeking a Summer 2027 internship to apply these skills in real-world engineering projects, contribute to innovative aerospace solutions, and further develop expertise in multidisciplinary collaboration, advanced system design, and aerospace technologies.

EDUCATION

Texas A&M University, College Station, TX Expected May 2028
Bachelor of Science in Aerospace Engineering

- Coursework: Thermodynamics, Aerodynamics, Aircraft Performance, Orbital Mechanics, Statics, Dynamics, Structures/Materials, Numerical Methods, Circuits, Multivariable Calculus, Differential Equations, Linear Algebra, C++, Python.
- Leadership: 12-member team lead for Lunar Search & Rescue challenge at TAMU SEDS, hosted by Space Teams University.

EXPERIENCE

Systems Engineering Intern Jun 2026 – Aug 2026
Raytheon | Woburn, MA

- Wrote and optimized MATLAB scripts by 88% for automated space-track fetch, 15,000+ LEO parse, FOV check, CSV output.
- Utilized TLE files, orbit propagation, space coordinate transforms; learned VBA to auto-format Excel; collaborated on Bitbucket.

Aerodynamics Engineer Sep 2025 - Present

TAMU Vertical Flight Design (VFD) | Design-Build-Vertical Flight Competition | College Station, TX

- Performed 100+ parametric fluid flow analyses to determine drag forces to feed into aerodynamics block of 6-DOF model.
- Programmed Monte Carlo optimization algorithm to generate 1000 flight paths under min points and max flight time constraints.
- Analyzed quadcopter simulation data to determine power at translation and hover states as a function of mass.
- Researched VTOL configurations, primarily multi-rotor, to maximize static stability and dynamic response during hover state.

Aggies Ignite Challenge x Vertical Flight Society Nov 2025

1st Place | College Station, TX

- Designed lift+cruise eVTOL to drop 5lb rescue package at 10K ft under 40 knot winds, 500 ft cloud cover, and 50% fog visibility.
- Python coded constraint analysis iterative sizing method to optimize MTOW, planform area, lift propeller area, & lift rotor fraction from 2M+ generated configurations. Derived propeller radius, pitch, and tip speed; motor torque, RPM; and T/W ratio.

Fluid Systems Engineer Feb 2025 – Jan 2026

TAMU Rocket Engine Design (RED) | College Station, TX

- Conducted N2O leak/pressure test (P&ID, procedure), failure mode and effects analysis (FMEA), created fluid systems assembly diagram, 11' tank machining approach, V&V, and presented at PDR and CDR for Elysium 2.0, a liquid bi-propellant engine.
- Implemented new BoM sheet with automated itinerary, cost authentication, and part override for physical and financial record.

Robotics Team Co-Founder and Captain, Upper Cabinet Secretary Mar 2022 - Jun 2024

Dougherty Valley Robotics Club | San Ramon, CA

- Won 8 awards, 4 state and national qualifications, and 2 world championship qualifications; ranked in top 2% of 20,000 teams.
- Established chain of command, project management and engineering design process workflow, and secured \$9,000 in funding.
- Oversaw CAD modeling, T&E, structural optimization, systems integration, and documentation; C++ autonomous routing, PID.
- Authored 1 technical, 1 management, and 2 program operational guides; Designer of *dvhsrobotics.com* 2023.

PROJECTS

- **Aggies INVENT**: Engineered, prototyped, and presented honeycomb plate-type SMR to maximize heat transfer.
- **IGNITE Design Challenge**: rocket CAD, FEA, aerodynamics, Python landing simulation, formal presentation with 95% score.
- **Robotic Launcher Optimization**: Determined 14 launch mechanism factors for optimization of catapults and slappers.
- **Eagle Project CAD (2021)**: CAD, wrote manual for, and assembled 14'x4'x3' and ~400lb load-bearing greenhouse bench.
- More information @ tx.ag/adarsh

SKILLS

Technical: SolidWorks, Fusion 360 CAD, SimScale CFD, MATLAB, Python, C++, VBA, Git, Simulink, Assembly, Trade Studies, T&E, FMEA, Design Review, Technical Report, Systems Integration, RC, Motor/Pneumatics. **Languages:** English, Gujarati, Spanish. **Professional:** Leadership, Creative/Critical Thinking, Logistics. **Productivity:** MS Suite, Excel, Google Suite, Adobe, Notion, Trello.

AWARDS / INTERESTS

Awards: 1st Place Aggies Ignite, VEX Worlds 2023 & 2024, 8x Robotics Trophies, Eagle Scout & 4 Palms, 3X PVSA, CSF.

Interests: Hiking, Photography, Media Editing, Travel, Philosophy/Ethics, Field Robotics, Catan, Baking, Origami, Digital Design.