Abhigyaan Deep

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Seeking full-time flight hardware engineering internships/co-ops starting Spring 2026.

Education

Iowa State University Bachelor of Engineering — Graduating May 2027

- Major: Aerospace Engineering — Ames, Iowa
- Minor: Cyber-Physical Systems — GPA: 3.83

Experience

OpenUAS Research | Laboratory for Temporal Logic — Aug 2025 - May 2026

- Designed a low-cost, **3D printable** flight testbed for researchers and educators.
- Deployed the **NASA R2U2** runtime verification for flight performance and post-mission.
- Implemented **PixHawk** 4/6 hardware powered by **QGroundControl**.

NASA Psyche Intern — Remote | Sep 2025 - April 2026

- Collaborated with mission scientists and engineers to translate technical topics into engaging content for the public.
- Published original science infographics and creative works for NASA's Psyche mission.

Projects

Zephron — Aug 2025 - Present

Stealth Drone R&D Team Lead and Engineer

- Lead a team of 4 in R&D for a **3D printed** dome optimized using the Coandă effect.
- Designed custom hardware with **MATEK FC** to support 4 control surfaces and a main rotor.
- Integrated **ROS** with ArduPilot to enable closed-loop PID stabilization using onboard IMU telemetry.

The Jet Engine Team (The J.E.T.) — Oct 2024 - May 2025

Combustion Chamber Design and Manufacturing Lead

- Manufactured a combustion chamber with **double-rolled stainless steel** to withstand 600 °C.
- Designed in **SolidWorks** and analyzed combustion rate in **Ansys** Student Suite.
- Tested integration with mock **3D-printed** compressors.

Skills

Software: SolidWorks, OnShape, Ansys, Git/GitHub, ArduPilot, VSCode

Languages: C++, C#, Rust, Python, MATLAB, Java, JavaScript, TypeScript

Other: 3D Printing, Systems Engineering, Project Management, Technical Writing & Communication, Soldering, MATEK FC, FEA, Control Systems Design, Aerodynamics