



# SPONSORSHIP PROPOSAL

# 2025-2026



Team Vyoma Aeromodelling Team R V College of Engineering





#### WHO WE ARE?

Team Vyoma is the **Aero-Design** club of RVCE. Started in 2007, it is one of the leading student projects in India- having won many national and international competitions, awards like the **NASA Systems Engineering Award** among many others.

#### WHAT DO WE DO?

The main objective is to design and develop **low-cost** UAVs and also carry out cutting edge **research** for the development of UAVs. It is where inquisitiveness and interest is ignited in young minds of engineering students and enthusiasts and is a platform to realize their dreams.

#### **OUR MISSION**

To develop state of the art technologies in the field Autonomous Robotics. To accelerate the growth of the Aerospace domain by conceiving a Societal UAV Era.

Rashtreeya Vidyalaya College of Engineering is one of the leading colleges in India and the top college in Karnataka. It has earned fame as one of the earliest self-financing colleges in Karnataka. The institution is run by the Rashtreeya Sikshana Samithi Trust (RSST). The trust runs over 25 institutions and RV College of Engineering is the flagship institute under their trust. Team Vyoma is affiliated to RV College of Engineering and functions as one of the **technical teams** present in the college. Team Vyoma is the technical team focused on **Unmanned Aerial Vehicles** and is one of the most prestigious and respected teams in the entire college.



# **ACHIEVEMENTS**

#### 1. SAE Aero Design East April 2008 Marietta, Georgia, USA

The plane project Vyoma debuted with a 2-meter wingspan. Specialty: RVCE and India's First entry in SAE Aero design Result: 18th place among 40 international teams Achievement: Felicitated by the then President of India Smt. Prathibha Devi Singh Patil.



#### 2. SAE 2013 West - California, USA

Project Vyoma's most successful year. Ranked 8th from over 70 teams. Designed a flying wing for the first time since its establishment. Won the NASA system's Engineering Award. Specialty: Lightest plane in the history of SAE at 133 grams with payload capacity of three times its weight. Also won NASA systems engineering award for systems design optimization.



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#### 3. AIAA DESIGN/BUILD/FLY April 2016 Wichita, Kansas USA

Being the 20th edition of the competition, the team had a challenging task of designing two planes- the manufacture support aircraft (MSA) and the production aircraft (PA). Speciality: The MSA was supposed to transport the PA as sub- assemblies inside it. Result: Design report secured 6th place.









#### 4. AIAA DESIGN/BUILD/FLY April 2017 Tucson, USA

The team had an interesting task of designing and building a tube launched UAV that is capable of being folded and stored in a compact cylinder.

Specialty: The aircraft had self-aligning mechanisms to move into flight ready condition from stowed condition.

Result: Secured first internationally for proposal. Couldn't attend fly off due to technical issues.



#### 5. IMAV 2017 - 9th International Micro Air Vehicles Competition

The competition was held in Toulouse France where the mission was to map an old war time aircraft hangar that had radio interference shields. The mission included a complete autonomous speed mission where Project Vyoma demonstrated the fastest Speed mission in quad-mode.

Speciality: Tilt-Rotor Quad with VTOL Compatibility, ability for use as a multipurpose autonomous drone. Result: Was placed 7th out of 15 International Teams.







#### 6. Boeing National Aero-modelling Competition 2023 Madras

Team Vyoma took on the challenge of designing an RC aircraft capable of carrying golf balls (each weighing 45g with a 43mm diameter). Our team successfully engineered a stable aircraft while meeting all the stringent payload requirements Speciality: The payload design included an innovative dual- opening system for smooth and efficient loading and unloading, addressing the mission constraints Result: Our team managed to land a place in **Top 20 out of 600 teams** 



#### 7. Fixed Wing UAV Challenge – Jain (Deemed to-be-University) 2024 Bengaluru

Team Vyoma faced the formidable task of designing a fixed-wing UAV which had to be equipped with a parachute-based payload drop mechanism. The challenge demanded the team to refine every detail to ensure the UAV could reliably carry and release its payload on target.

Speciality: The fuselage was ingeniously designed to open mid-air, allowing a **500-gram** payload to be dropped with a parachute while maintaining the UAV's stability. Result: Secured the '**Best Performance Award**' out of 12 teams.







#### 8. TechFest - National Aeromodelling Competition – IIT Bombay, 2024 Mumbai

Team Vyoma took on the challenge of designing an RC Aircraft that could carry payloads of varying weights while maintaining stability and precision. Our team excelled in engineering a lightweight yet robust aircraft that adhered to strict weight and size specifications, ensuring optimal flight performance.

**Specialty:** The design featured a unique wing configuration and enhanced aerodynamics to improve lift and stability under challenging conditions.

**Result**: Through meticulous testing and innovation, our team secured a spot in the **Top 25 out of 300 teams**, marking a significant achievement in this highly competitive event.







# PROJECTS

#### 1. Solarify

Aimed at increasing endurance by taking the aid of solar energy as power source for the plane.

Payload capacity – 1.2 Kg

Endurance – 8 Hours

Altitude – 100m

Cruise velocity – 10m/s

#### **Other Projects include:**





4. Bicopter



3. Tri-copters

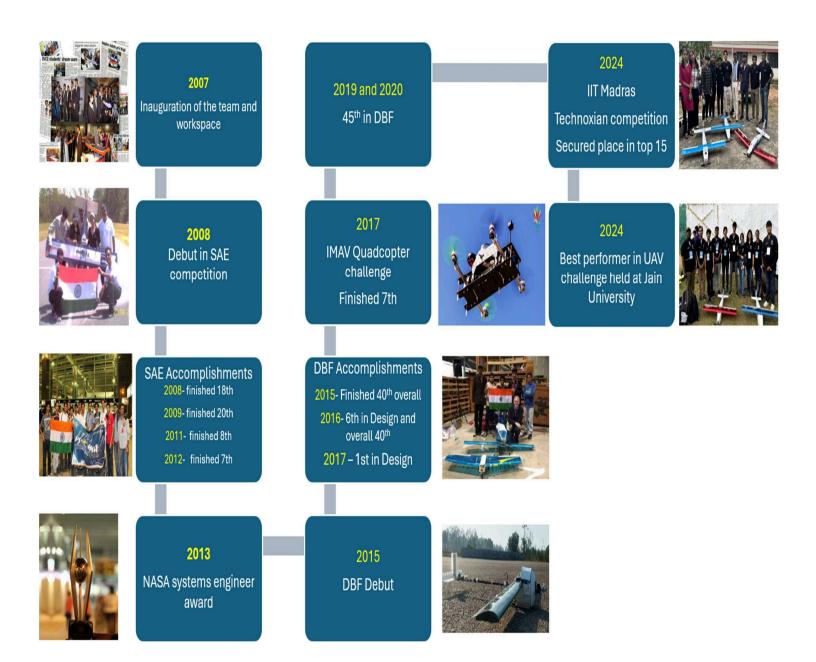


5. Pulse Jet Engine





# Milestones







## **Research Projects:**

1. State-of-the-art testing facilities, including a Static Thrust Bench and Dynamic Wind

Tunnel.

2. An innovative **Blended Body Wing (BWB)** design for improved aerodynamic efficiency.

3. Cutting-edge R&D into Magnus Effect-based planes, autonomous gliders, and Blended Wing Bodies (BWB).

### Upcoming Competitions:

Fixed-wing UAV for the 2026.
Design/Build/Fly competition.
National Aeromodelling Competetiton IIT
Bombay 2025

# Proposal

We would like to propose a mutually beneficial sponsorship opportunity, as the undertaking of these projects require external monetary support to manage the finances and cover critical costs including

#### **Acquisition of Advanced Materials**

Material manipulation services such as 3D Printing and Laser Cutting

Auxiliary equipment including electronic components such as batteries and motors

#### Logistics expenses

In return for your much appreciated support, Team Vyoma would provide several Deliverables which will help magnify the visibility of your Brand to a large extent. We would ensure the following: Prominent Brand Visibility All our projects which have been built with assistance

from your company would prominently display your brand symbols on our UAV's, Team Apparel, Event Banners, Brochures and Catalogues. This will ensure larger visibility at highly acclaimed national and International events, grabbing attention from diverse audiences across Academia, Industrial and Technological sectors.





Fostering connections with Emerging Engineering talent. As a valued sponsor, your company would gain **exclusive access** to our team of **talented future engineers**. We invite your representatives to participate in **technical workshops**, design reviews, and collaborative discussions, fostering a mutually beneficial exchange of expertise. This partnership also provides your company with a unique opportunity to engage and attract **top-tier skilled engineers** who align with your mission and goals.

**Expanded Digital Presence** and **Community Engagement** With a strong social media presence, Team Vyoma can bolster your company's digital visibility and enhance engagement within the aerospace and innovation communities. Mentions on our digital platforms would place your brand at the forefront of discussions around **cutting-edge UAV development.** 

# How Sponsorship from your company helps Team Vyoma?

Advancement of Critical UAV Projects Financial support from your side helps us immensely to **fund** the intensive research, manufacture and logistics of our aforementioned projects such as the **Magnus Plane** and the **Advanced Wind Tunnel**.

Display of Indian Engineering Prowess at the Global Stage The support that we receive from your company helps us fund the travel, transport and accommodation costs to venues at international events, affording us single-minded commitment to our work without the constant worry of taking care of expenses.

#### Attainment of High Standards for Performance Maintaining professional standards

in our projects to ensure that every step of the process and every aspect of the final result is as refined as possible, requires time, effort and **substantial costs** and has been the primary reason for the team's exceptional performances in national and international events. The **monetary support** that we receive from your company helps us attain these standards and showcase a distinct attention to detail, professionalism and performance by the team and the backing company.

In short, we envision a **collaboration** that will not only enable our team to succeed but also strengthen your company's presence in the aerospace and technology sectors, setting a benchmark for **industry-academic partnerships** and we would be honored to have your company's support in helping Team Vyoma reach new heights in **UAV innovation**.



VYUMA

A sponsorship chart is depicted below which is the sponsorship standard that Team Vyoma uses. Benefits from the team will be provided in every possible way the team can, based on the monetary value of your support. The team is willing to work out any other way so that we end up with a mutually beneficial partnership.

\* Gold (1,00,000 and above) \* Silver (50,000 and above) \* Bronze (Upto 25,000)

Deliverables	Bronze	Silver	Gold
Benefits	25,000	50,000	1,00,000
Availability of Team for Presentation		$\checkmark$	$\checkmark$
Exclusive Video		$\checkmark$	$\checkmark$
Website Presence	$\checkmark$	$\checkmark$	$\checkmark$
Campus Ambassadors			$\checkmark$
Assistance in Workshops		5-	$\checkmark$
Social Media Shout Out	$\checkmark$	$\checkmark$	$\checkmark$
CSR Tax Incentives (Section 80G)	$\checkmark$	$\checkmark$	$\checkmark$
Conduct Placement and Internships		5-	$\checkmark$
Acknowledgement in Team Publications / Events		5-	$\checkmark$
Social Media Collaborative Reels			$\checkmark$
Logo Placement Team App	parels and Planes		
20 x 20cm Logo on Plane			1 Logo
15 x 15cm Logo on Plane		1 Logo	
10 x 10cm Logo on Plane	1 Logo		
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# **CONTACT US**

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