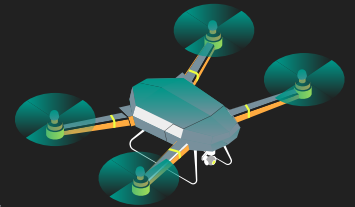




# Drona

Drones + Agents = Conversational Aerial Robots 



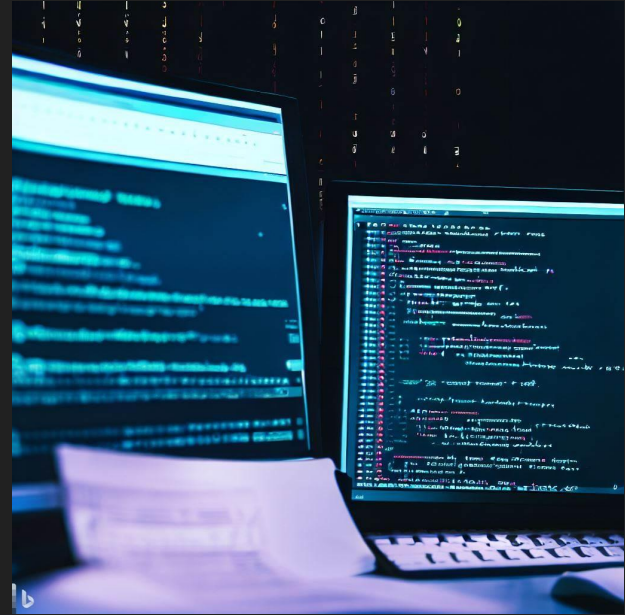
# The Current State of Autonomous Agents

## Autonomous Agents Today:

- Limited to computer interfaces.
- No real-world robot interaction.

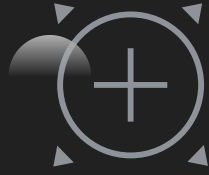
## Computer based tools:

- Coding tool
- Search tool
- Web scraper tool



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# Drona: Drone-Agent



Give Autonomous Agents Wings:

- Drone Control Software
- Inspired by Dronacharya: the wise teacher.



Beyond Joysticks and Keyboards:

- Natural Language Commands.
- "Emotional Brain" for empathy and interpretation.



# Safe and Ethical Drones



## Privacy vs. Safety.

Drones embedded with software and hardware that breach privacy.

Manufacturers often employ these to track and even disable drones if they're repurposed for illegal activities, such as weapons or espionage.



## Drona: Prioritizing both.

Drona challenges this paradigm, offering a system where both safety and ethical considerations are prioritized by the agent.

Agent understands human intentions and follows safety guidelines without sharing data with manufacturers.



---

# Features



## Safety and Ethics

Follows guidelines on ethical commands



## Multilingual

Multilingual Support - Hindi, German, and Japanese tested



## Follow-me

Human Follow around



## Find my location

Location based control



## Task breakdown

Complex Task Decomposition



# Drones in Agriculture

**\$10 billion**

## Market size by 2028

CAGR of 28.63% between 2021-2028 in the US

**\$12 per Acre**

## ROI

For maize and \$3 per acre ROI for wheat

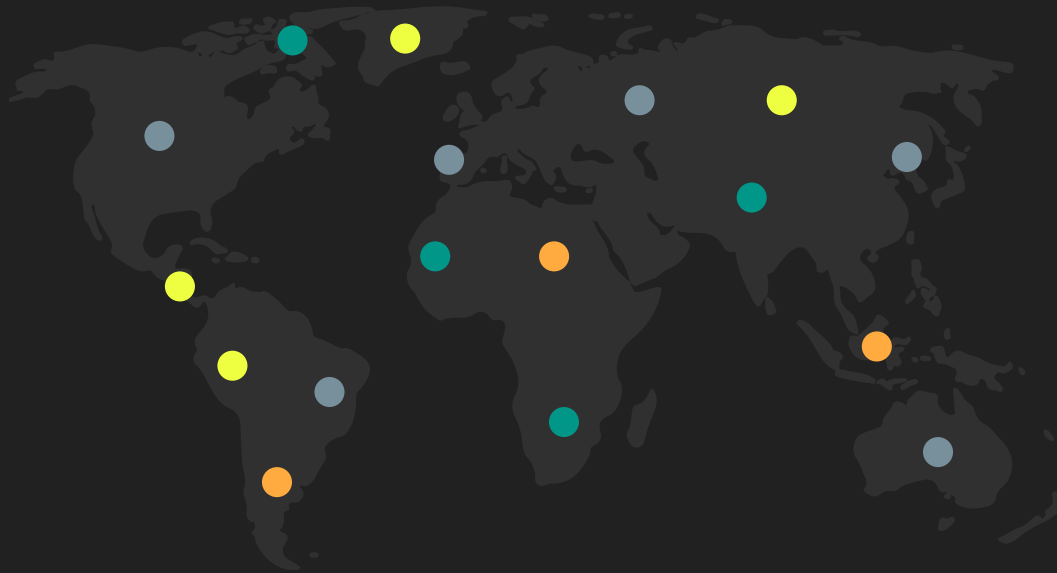
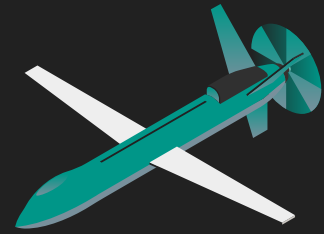
**80%**

## Water usage reduced

Compared to manual spraying



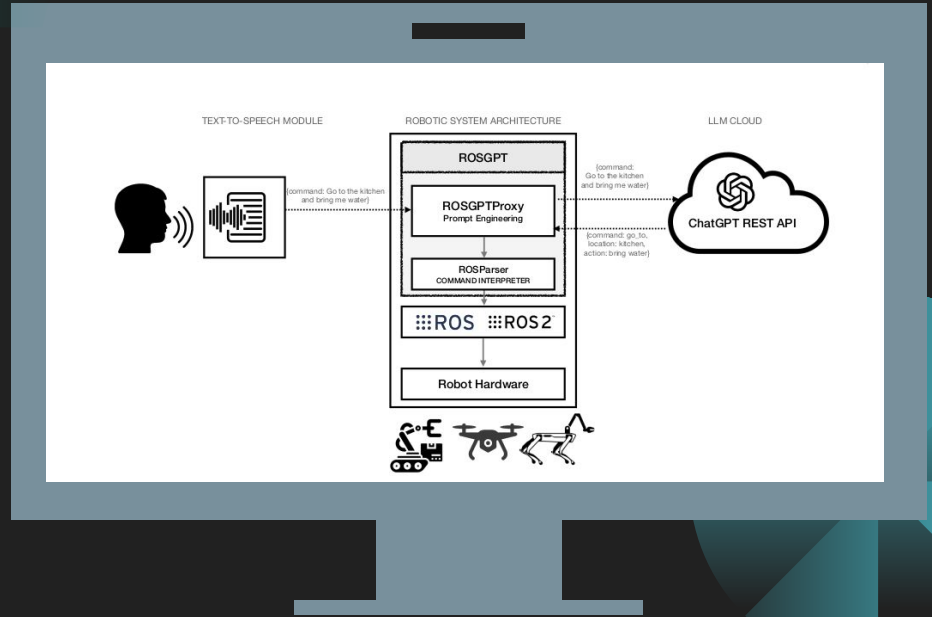
# Disaster Relief Drones



- TIME IS CRITICAL
- DELIVER SUPPLIES
- NO LEGISLATION
- 880 LIVES SAVED

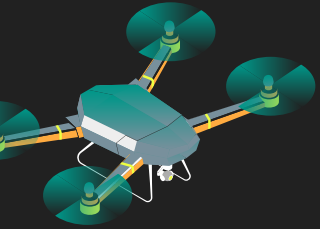
# Tech Stack

1. ROS2 Humble
2. Gazebo
3. Langchain
4. Next.js





# TEAM



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subhamx

**Pratyay Banerjee**  
Neilblaze

**Gaurang Ruparelia**  
chief\_of\_mischief

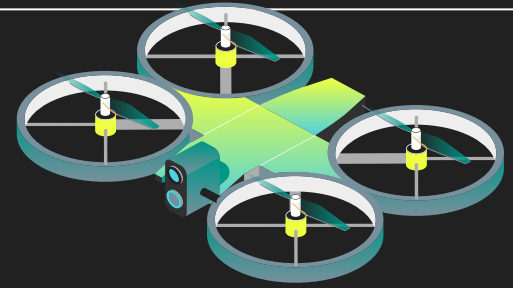
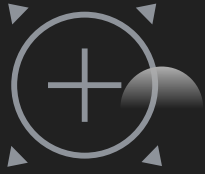
**Sakshay Mahna**  
sakshaymahna

Team

Crafted with ❤️ at  at

Autonomous Agents Hackathon 2023





Thank You

- Team Drona

