

Unlocking the Power of Drones

Welcome to the world of drones!

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Title: Student Innovation

Problem Statement:

Creating of Drone and Robot control GUI(Graphical User Interface) and a emergency response control panel



Description:

There is a need to design Drones and Robots that can solve some of the pressing challenges of India such as handling medical emergencies, search and rescue operations etc.

Introduction to Drones



What is a Drone?

A flying robot that can be remotely controlled or fly autonomously using software-controlled flight plans in its embedded systems and also known as unmanned aerial vehicles(UAVs)



Flying drones

Flying drones is like piloting a small,remote-controlled aircraft.They can be controlled by a person using remote or smartphone.



Drones in Action

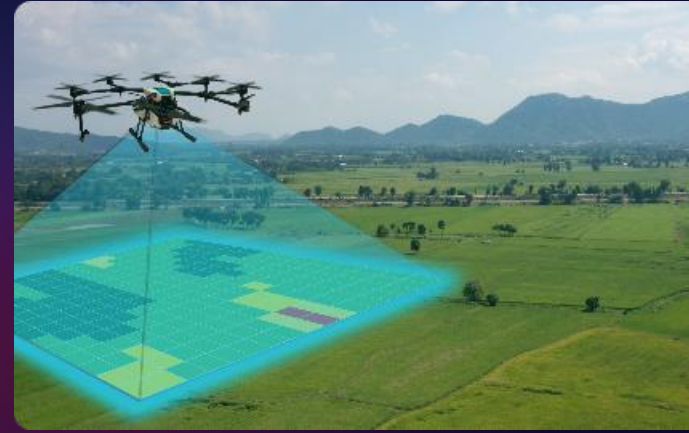
Drones are used for various purposes,detecting emergencies,including aerial photography,surveying landscapes,and delivering packages

Data Collection and Analysis with Drones



Visualizing Data

Visualizing data using a drone involves using a drone to capture images or videos of a specific area from above. These images or videos can then be analyzed and processed to extract valuable information or insights.



Mapping the Emergency Site

Mapping emergency sites with drones can provide real-time data for emergency response. Drones equipped with cameras or sensors can capture images, assess damage, locate survivors, and aid in planning rescue operations. The collected data can be processed using GIS (Geographic Information System).



Rescue Operation

Drones are valuable tools in rescue operations, providing aerial views for assessing emergency sites, and delivering supplies to inaccessible locations. They enhance efficiency and safety in various emergency scenarios such as search-and-rescue missions.

Coding and GUI Development

1

Software Integration

Explore the process of integrating drone hardware and software, enabling teams to develop customized drone applications for specific use cases.

2

Programming Languages

The language and framework commonly used in drone programming is HTML, and we can also use Python, C++, CSS, and JavaScript, and their applications.

3

Testing and Debugging

Learn best practices for testing and debugging drone applications, ensuring smooth performance and identifying potential issues.



THANK YOU

