

Liquid Galaxy in deforested area projects



All of us know for some reason that we need to start being cautious about our world's health. With increased use of technology we seem to have developed a new crisis for ourselves, by taking away the natural resource of earth: FORESTS. Disappearing forests have become a global concern now, and its dreadful impact has been seen in the form of Climate Change, which is one of the pressing issues faced by the global community. It has also been brought to notice by the United Nations in the form of Sustainable Development Goal 13.



For an issue of immense importance there must be some counter measures that make sure that the lost resources are brought back.

Here is where Liquid Galaxy pitches in. A well-made open source collaboration can locate and bring back the greenery in deforested areas on a large scale. When multiple organisations combine together to form something miraculous, the outcome is humongous and positive too.

Open Source is a boon to this community. People are aware of what is happening in the world and also have different ideas and solutions. But there is lack of a proper source for contributing. Open source has opened the doors for this community to collaborate and pour in their ideologies and views towards the development of a pollution-free world.

We all are aware of the DroneCoria collaboration Liquid Galaxy is having, which is of utmost use to this initiative. It first locates the deforested areas and then uses drones that carry seedballs with them that are then released in the particular area that is devoid of forests. With the help of a seed dispenser and a wooden drone (yet strong), the basic setup is complete. After accurate calculation and research, a restoration map is plotted, and the soil type of that area is understood well. According to the soil type, the seedballs are prepared and made sure that it works

effectively while also considering the erosion factor in that area. Finally the drones are deployed and each drone releases one seed per second, at an amazing speed of 3600 seeds per hour!



We also know about Tensorflow's use in this to determine which areas need seeds more. With the photos of deforested areas captured by contributors, the level of deforestation can be determined that is in turn going to help in deciding which place needs seeds the most.

One more important thing to ponder about is, how much area can we cover with just photos?

One problem that people face is, lack of power and resource to bring back greenery in their neighbourhood. Such places can be searched in Google Earth and saved as a POI(I'm suggesting this because most students are aware of the simple yet powerful process). This data can be accessed by the Liquid Galaxy Controller app too.



We know these drones are going to be controlled by huge setups. However, we can aim to achieve the same task using just a smartphone. Using the Liquid Galaxy controller app, we can control one drone for each device. This will make the accessibility handier and easily reachable. Drones can be connected with the smartphones wirelessly and the smartphone will not only have features for navigation and seeds dispersal but will also get a view from the drone's perspective. Therefore controlling the drone is going to be like playing a video game but in real time, it is going to be vastly beneficial to the community!



The initiative taken by the project “Global Forest Watch” is a dream come true. Continuous monitoring of forest is essential to prevent deforestation. This idea initiated by World Resources Institute along with different partners including Google is helping in this constant watch program. My idea here is to suggest the collaboration of both like-minded open source organizations. That is the

integration of Liquid galaxy with the Global Forest Watch initiative can work wonders. Liquid Galaxy is known for its rich display of panorama with the help of multiple systems. With such a technique this Global Forest Watch would be able to have a view of all the deforested areas in a clear way so that it would be possible to closely watch and work with afforestation using the earlier suggested techniques such as the DroneCoria and the Tensorflow.

GCI and LG are already pioneering in assigning various tasks to the young minds involving open source. This can be taken as an opportunity to set fire(pun intended) on the minds of youth to create sparkles which would put down the fires of the forests.