



A NATIONAL LEVEL TECHNO-MANAGEMENT FEST
AARUUSH'21
...rising in the spirit of innovation

TECHNO_CHAMP:



Challenge

DRONES AND SATELLITES FOR URBAN DEVELOPMENT



WELCOME:

Good morning one and all gathered here. I am very glad to welcome u all for this challenge organized by NASA Space app challenge

QUOTE:

- Better to be three hours too soon, than a minute too late

OVERVIEW:

- We are here to explain our idea to specify some features to develop our Nation one more step ahead by taking this topic “DRONES AND SATELLITES FOR URBAN DEVELOPMENT”. We are ready to explore our greatful and creative ideas to you.
- Now a days we are using satellite to identify and moderate the cities, Environments, affordable, accessible and sustainable transport systems for all, improving road safety etc,.
- Here some of the explorers to develop the Nation with the help of NASA

BRIEF DESCRIPTION:

- In this projects we are have some intelluctual ideas to develop a urban areas by satellites and drones by using Bio metric face recognition,pixels and remote sensing
- We also consume the air and filter it by UAVs by using the filter.
- We also have a idea about using UAVs for construction purposes.
- we can also use UAVs for mapping and additionally adding Virtual Reality by making steps easier to view of the humans,places,and any disasters
- We modulate the UAVs and taking to the next step forward to develop the urban areas
- We develop a city specific tool (or app) for computing an indicator

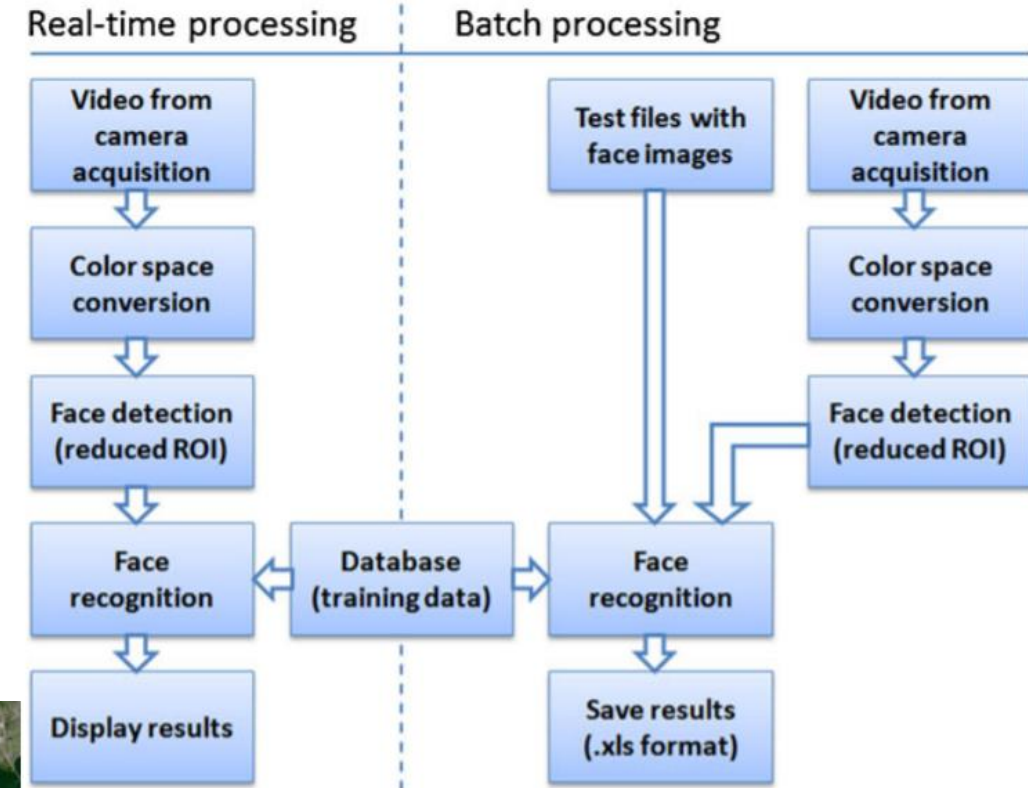
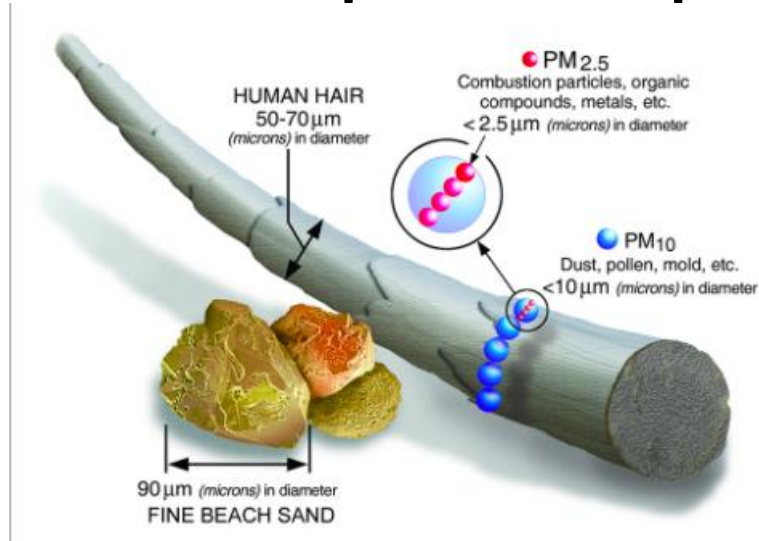
WHY THIS PROJECT:

- Basically, I am a person who is always care about environment. And I have a little bit knowledge about space
- And also which is related to my subjects and also very intrested to do this

WHATS NEW IN THIS PROJECT:

- We are using face recognition and pixels for the identify the humans and identify the places
- Can we also using remote sensing for the survey of the landmarks
- We also set the filter for the air quality

Aerosol Optical Depth and PM2.5



Process of face recognition

Picture taken by pixels



Objectives:

- Our challenge is to demonstrate how spaceborne, airborne, and ground-based remote sensing data can be combined with data collected by UAVs - We have analyse the data from spaceborne and UAVs draw a 3D modelling and analyse the datum
- Quality of urban-related indicators-We using Aerosol and Optical depth for filterng the air and kept environment good
- Improvements to the quality of people's lives in cities and local communities-By using the filtering the air and monitoring the Environment good and clean
- A city-specific tool (or app) for computing an indicator-To develop a app for monitoring the pollution and keep Environment clean
- A digital story-telling product-A web portal can be created and all the steps were included

TEAM MEMBERS:

- LEADER: Vanshmani Vit University, Chennai, Grad. Yr : 2025
- MEMBERS: Pugazhendran, PSG Institute of Technology and Applied Research, Graduation year - 2024
- Tanishka Maheshwari, SRM University, Chennai, Graduation year : 2025
- Prakhar, SRM Chennai KTR, Graduating year is 2025

REFERENCE LINK:

- <https://earthdata.nasa.gov/learn/pathfinders/sdg-data-pathfinders/sdg-11-data-pathfinder>
- <https://anyconnect.com/blog/facial-recognition-applications/>
- <https://eo-toolkit-guo-un-habitat.opendata.arcgis.com/pages/mexico-use-case>
- <https://link.springer.com/article/10.1007/s11042-013-1568-8>
- https://github.com/Vanshmani/Techno_Champ