

UNMANNED AERIAL VEHICLES (UAVS)

There are four abstracts that fall under the topic. Students and Mentors can choose any one of them.

They are as follows:

1. Mapping & Terrain

Unmanned Aerial Vehicles (UAVs) are powerful tools for surveying, able to produce georeferenced, ortho rectified maps and accurate topographic and terrain models. More and more companies in mining and other industries are planning to incorporate drone-based aerial surveys into their operations

2. Vegetation Analysis

Unmanned Aerial Vehicles (UAVs) are powerful tools for vegetation analysis relevant to crops and/or irrigation. The aerial collection of vegetation indices is valuable for the health assessment of green vegetation. They are also useful in understanding and optimizing the required irrigation.

3. Accurate 3D Models

Unmanned Aerial Vehicles (UAVs) are powerful tools for providing detailed, accurate 3D models and point clouds of buildings. More and more architectural and real estate companies are using aerial vehicles for acquiring accurate 3D models of buildings.

4. Mosquito Habitats

With the rising impact of vector borne diseases such as Zika and West Nile Virus, unmanned Aerial Vehicles (UAVs) are powerful tools for providing information on the breeding sites of mosquitos. All mosquitos breed in water. Aerial vehicles can provide detailed surveys of the status of all current water bodies from a puddle, to a pond, to a lake.