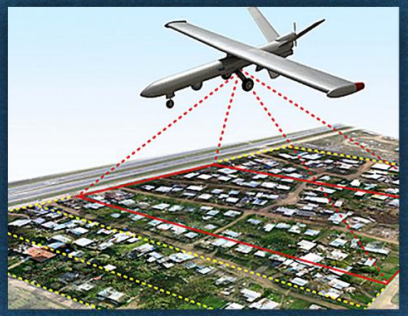

Through the use of geospatial technology which permits autonomous flight, GIS mapping drones are revolutionizing how remote sensing data collection is taking place at job sites across the world.

GIS, or geographic information system have long desired high-resolution images in near real time. Ever improving software and new optical technologies have given drones the ability to capture such data over larger land areas. In addition, a drone's unparalleled ability to fly at altitudes significantly lower than a manned or fixed-wing airplane enables it to capture survey images with sub-centimeter accuracy and with much greater resolution than had previously been possible. And with the large amount of overlap in the imagery, digital photogrammetry processing results in orthomosaics and 3D point clouds for GIS of similar high resolution. Finally, with drones, image turnaround time typically takes just a few hours, rather than weeks or months by traditional aerial mapping methods such as helicopters, plane, or manned survey team. The bottom line for GIS is that photogrammetry from drones are superior in detail, can be captured more frequently and faster, and cost less to produce.

Ramakrishna Mission Shikshanamandira

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RAMAKRISHNA MISSION SIKSHANAMANDIRA

in collaboration with

OPSIS SYSTEM PVT. LTD.

Presents

National Workshop (7 days) on

DRONE-SURVEY, DATA PROCESSING & GIS MAPPING

[under RUSA 2 - Component 8 grant]

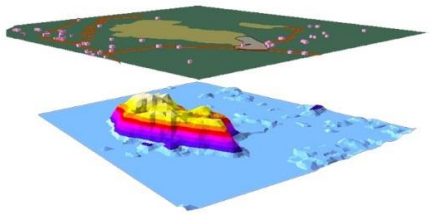
The Workshop is interdisciplinary in nature. The participants may be faculty members, research scholars, industry persons, students from various institutes of technology & science.

Date: 10th, 11th, 12th, 13th, 16th, 17th & 18th April, 2019

Contact: Dr. Pradip Sarkar - 9477271097/ Alik Kumar Mondal - 9804161118

Venue: Ramakrishna Mission Sikshanamandira

Day	Time	Description
01	10am – 11am	Introductory session
	11am – 12noon	Brief introduction to the course and background
	12noon – 1pm	Introduction to GIS
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	Introduction to Remote Sensing
	3pm – 4pm	Introduction to DRONE
	4pm – 4:30pm	Tea break
	4:30pm – 5pm	Revision and Q/A session
02	10am – 11am	Process flow of DRONE survey
	11am – 12noon	Introduction to DRONE post processing
	12noon – 1pm	System requirements and data usage
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	Field on Drone flying
	3pm – 4pm	Field on Drone flying
	4pm – 4:30pm	Tea Break
	4:30pm – 5pm	Revision and Q/A session
03	10am – 11am	Introduction to PHOTOMOD
	11am – 12noon	Post-processing of images for stereo viewing
	12noon – 1pm	Post-processing for DEM generation
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	Post-processing for Ortho-photo generation
	3pm – 4pm	Post-processing continued
	4pm – 4:30pm	Tea Break
	4:30pm – 5pm	Revision and Q/A session
04.	10am – 11am	Flying of Drone
	11am – 12noon	Flying of Drone
	12noon – 1pm	Flying of Drone
	1pm – 2pm	Lunch
	2pm – 3pm	Data Download and Geotag images
	3pm – 4pm	Data Download and Geotag images
	4pm – 4:30pm	Tea Break
	4:30pm – 5pm	Revision and Q/A session



Day	Time	Description
05	10am – 11am	Introduction to TNTmips GIS and Image Processing
	11am – 12noon	3D stereo view and digitisation
	12noon – 1pm	Land use digitization
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	Practice of software
	3pm – 4pm	Practice of software
	4pm – 4:30pm	Tea Break
	4:30pm – 5pm	Revision Q/A session
06	10am – 11am	PHOTOMOD Practice
	11am – 12noon	PHOTOMOD Practice
	12noon – 1pm	PHOTOMOD Practice
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	TNTmips Practice
	3pm – 4pm	TNTmips Practice
	4pm – 4:30pm	Tea Break
	4:30pm – 5pm	Revision , Q/A session
07	10am – 11am	DEM , contouring , Spatial Analysis
	11am – 12noon	Watershed Analysis
	12noon – 1pm	PRACTISE
	1pm – 2pm	LUNCH BREAK
	2pm – 3pm	PRACTISE
	3pm – 4pm	Revision and Q/A session
	4pm – 5pm	Valedictory session

OBJECTIVES

- Remote sensing
- Surveying
- Precision agriculture
- Terrain mapping/modeling
- 2D and 3D image/ topographic image analysis
- Ortho-mosaicking
- Weather monitoring
- Oil and Gas exploration
- Mining
- Transmission line monitoring
- Filmmaking
- Disaster response and relief