

2020 Research (Funded)



No	Title	Head of Researcher	Scheme	(Rp)	Note
1	a) Alternative Geometric Planning for Entrance Road on Sukabumi Village - Tiga Dihaji Dam on South Oku District using Spatial Based Fuzzy Clustering Algorithm Method	Hepi Hapsari H	BRIN – Master Thesis	50.000.000,-	1 Year
	b) DTM Building based on LiDAR Data using Slope Based and Morphology Method to Support Flood Modeling	Hepi Hapsari H, Agung B. Cahyono	Doctorate Research – ITS	40.000.000,-	1 Year
2	Risk Potential and Flood Evacuation using Quantitative Risk Assessment (QRA) Method	Nurwatik, Bangun Muljo S	Initiator – ITS	50.000.000,-	1 Year
3	a) Dynamic Topographic 3D Relief Modeling based on Open Source GIS for Disaster Geo-visualization Support	Agung B. Cahyono, Yanto Budisusanto	BRIN – PDUPT	70.000.000,-	2 Years
	b) Prototype Development Simulator for Earth 3D Topographic Surface using Augmented Reality Technology	Agung B. Cahyono, Husnul Hidayat, Udiana W. Deviantari	Prototype - ITS	60.000.000,-	1 Year



RESEARCH AND COMMUNITY SERVICE ROAD MAP GEOINFORMATICS LABORATORY

Department of Geomatics Engineering – FTSPK – ITS



2020

2021

2022

2023

2024

Geo-
Computation

Geo-
Information

Geo-
Visualization

Developing curriculum and module for Geo-Computation based learning by empowering human resources of Geoinformatics Laboratory by actively joining reputable international conferences and journals.

Participating and supporting module development and workshop in Building Information Modelling (BIM) accompaniment by establishing

Utilizing LiDAR technology for geospatial data acquisition for spatial analysis.

Applying spatial technology for 3D city modelling

Applying non-metric camera-based UAV-Photogrammetry for terrestrial and aerial data acquisition support.

Developing UAV e-GNSS and Multi-spectral sensor for plant monitoring research, detail mapping, and data acquisition for 3D modelling.

Utilizing information technology for spreading and analysing data based on GIS.

Developing GIS technology and applying it to the community for Dynamic Modelling: Environment, Hazard Mitigation, and Urban Development.

Applying Augmented Reality technology for 3D modelling of the Surface Model.

Developing modelling tools by applying Augmented Reality technology (TopAR®) and Grass Tangible Landscape.

Reviewing Computer Vision Technology using a 3D sensor and a 360 camera.

Applying 3D modelling using Computer Numerical Control (CNC) tools.