Muhammad Dika Oktoberdinata

oktoberdinata@gmail.com | +62 853-8866-7997 | linkedin.com/in/oktoberdinata |
Pogung Dalangan Street, Sinduadi, Mlati, Sleman, Special Region of Yogyakarta. 55284

PROFILE

GIS and Remote Sensing practitioner with a robust foundation in Geography, Geographic Information Systems (GIS), and Remote Sensing. Proficient in spatial mapping software and scripting languages for advanced geospatial analysis and modelling. Demonstrated experience in mapping projects, water quality monitoring, land-cover classification, and ecosystem-based restoration. Strong communication, field coordination, and team leadership skills.

Explore my portfolio of maps and projects: Map and Project Portfolio

PROFESSIONAL EXPERIENCE

Remote Sensing Master's Thesis Research, Semayang Lakes
August 2024 – July 2025

- Coordinate closely with local government agencies, academic institutions, and field teams to streamline research activities.
- Develop and manage a structured project timeline covering pre-field, field, and post-field phases.
- Lead a three-member field survey team, delegating tasks and ensuring efficient operations.
- Measure water transparency in situ using Secchi Disk methodology.
- Collect water samples for laboratory analysis of chlorophyll-a and total phosphorus to assess trophic status.
- Prepare training datasets: perform descriptive statistics, outlier detection/removal, pixel extraction from Sentinel-2 MSI imagery, and image transformations to optimize model inputs.
- Train and validate models integrating in-situ and remote sensing data for trophic status mapping.
- Produce classification maps and spatial analysis reports as final deliverables for ecosystem quality interpretation.

Biomass Surveyor (Surface Biomass Measurements), Faculty of Geography, Universitas Gadjah Mada
December 2023

- Recorded coordinates, diameter, height, and canopy cover of sample trees; collaborated with survey team members.
- Organized and maintained accurate survey documentation to support monitoring, evaluation, and reporting efforts.

Field Course Coordinator, Faculty of Geography, Universitas Gadjah Mada
February - July 2023

- Designed and planned comprehensive field activities, including scheduling and research proposal development for benthic habitat studies.
- Collected benthic habitat data using underwater photo-transect methods at multiple sites.
- Pre-processed photos transect data: grouped by transect location and cropped images for cover estimation and classification training.
- Calculated benthic component cover percentages and labelled seagrass species using CPCE (Coral Point Count with Excel Extension).
- Trained seagrass classification models on PlanetScope imagery, leveraging manually annotated training data within ENMAP Box.
- Developed and evaluated Random Forest and Support Vector Machine classifiers using varied parameter schemes and cross-validation to optimize accuracy.
- Generated seagrass species classification maps and compiled final reports featuring spatial analysis and model accuracy assessments.

GIS Operator (Freelance), CV. Meja Belakang, Samarinda
October – December 2021

- Digitized land-cover from drone imagery for southern Sulawesi and Maluku Islands using ArcGIS.
- Validated topology and corrected geometric errors to ensure vector data quality.
- Coordinated with project PICs to meet technical standards and deliverables specifications.

EDUCATION

Universitas Gadjah Mada | Master of Science in Remote Sensing | GPA: 3.78 / 4.00   February 2023 – July 2025
Master of Science in Remote Sensing
Mulawarman University | Geography Education | GPA: 3.45 / 4.00   July 2018 – Mei 2022
Bachelor of Education in Geography

Awards

KALTIM TUNTAS Scholarship (Stimulant)	2021
KUKAR IDAMAN Scholarship	2022
East Kalimantan Provincial Scholarship	2023 - 2024

ORGANIZATIONAL INVOLVEMENT

UKM Sepakbola dan Futsal Pascasarjana	Universitas Gadjah Mada	March 2023 – July 2025
Student Executive Board, Faculty of Teacher Training and Education (BEM FKIP)	Mulawarman Univeristy	February – December 2021
Student Executive Board, University Level (BEM KM)	Mulawarman Univeristy	February – December 2021
Geography Education Student Association	Mulawarman Univeristy	January 2019 – December 2020

SKILLS

Monitoring, Evaluation, and Learning (MEL) | Communication | GIS| Remote Sensing | QGIS | ArcGIS | Google Earth Engine | SNAP | ENVI | ENMAP Box | Agisoft Metashape | DSAS | SWAT+ | Drone | Drone Imagery Processing | Python | R Studio | Microsoft Office | Data Analyst |

CERTIFICATIONS Certificate Link

Microsoft Excel Basic	MySkill	July 2025
Hydrological Modelling (Water Balance, Surface Runoff, Sediment Erosion) with SWAT+	GeoAccess Indonesia	February 2025
Python Bootcamp for Spatial Data Analysis	GeoAccess Indonesia	December 2024 – January 2025
Training on Ecosystem-based Approach (EbA) for Mangrove Conservation and Surface Carbon Mapping	KLHK & UGM	November 2024
Bootcamp Data Science Batch 2 - Mastering Machine Learning in Data Science: From Basics to Applications	Educativa Indonesia	July – August 2024
Geospatial Data Science with R	Udemy	June 2024
Basic Class - Data Management, Image Collection & Processing using GEE	Geosoftware	February 2024
Thematic Geographic Information System (GIS) Training: QGIS Molusce x InVEST Plugin for Carbon Storage Calculations and Future Predictions	GeoAccess Indonesia	December 2022