



DHANY YUDI PRASETYO

Geospatial & GIS Engineer

CONTACT

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Jakarta, Indonesia

[Portfolio](#)

[LinkedIn](#)

[GitHub](#)

EDUCATION

Surveying and Mapping Technology

Universitas Gadjah Mada

2021 - 2023

GPA: GPA 3.90/4.00

Geomatics Engineering

Universitas Gadjah Mada

2018 - 2021

GPA: GPA 3.83/4.00

SUMMARY

Geospatial and GIS engineer with over 3 years of experience in spatial data management, spatial analysis and routing system development, for a mobility technology company and national strategic infrastructure projects. Certified by BNSP as a GIS Manager/Specialist, with a background in geodetic survey and UAV LiDAR.

EXPERIENCE

Associate Cartography Engineer

2024–2026

[SWAT Mobility](#)

Remote (Singapore)

- Developed and calibrated OSRM Lua profiles for 14 vehicle classes across 5 Asian markets (Bangkok truck-ban, Manila Number Coding, Indonesia delivery restrictions, Japan speed limits)
- Diagnosed production routing failures, resolving a memory bottleneck in speed-update step and eliminating stalled HTTP pipeline latency
- Maintained OpenStreetMap layer: periodic PBF refreshes with client restrictions, OSRM engine upgrades, and full graph rebuilds
- Designed and maintained 5 internal platforms including GIS self-service operations and routing-backend inventory dashboard
- Automated 6 workflows: validation integrated with Jira, daily route reachability alerts, and performance monitoring refactoring

Geodetic Officer, Toll Road Planning Division

2023–2024

[PT Hutama Karya \(Persero\)](#)

East Jakarta, Indonesia

- Led UAV LiDAR acquisition (VTOL and multi-rotor platforms) along Trans-Sumatra Toll Road corridors
- Processed LiDAR point cloud classification (ground and non-ground) to produce high-precision DTM models for alignment geometry planning
- Designed GPS control networks and traverse polygons to improve spatial accuracy
- Architected ArcGIS Enterprise asset management digital twin integrating LiDAR and UAV survey data for 131.69 km segment
- Built Power BI analytics over 9,800 geotechnical borehole points and BIM implementation KPIs

GIS Programmer

2023–2023

[PT Gerbang Inovasi Geospasial](#)

Sleman, Yogyakarta, Indonesia

Freelance Geospatial Consultant

2023–2024

[Independent](#)

Indonesia

SKILLS

Survey Equipment

Geodetic GPS, Waterpass, Theodolite, Total Station, LiDAR, Single Beam Echosounder

UAV/Drone Operations

VTOL, Multi-rotor UAV, CHCNAV LiDAR, Flight Planning, GCP/ICP Deployment

GIS & Mapping

QGIS, ArcGIS, Supermap iDesktop, LiDAR Processing, DTM Generation, Basemap Curation

Web Development

JavaScript, Python, Django, Leaflet, WebGIS, Full Stack Development

Data Visualization

Power BI, BIM, Dashboard Development

Routing & Mobility

OSRM, Vehicle Routing, ETA Optimization, OpenStreetMap

LANGUAGES

Indonesian

Native

English

Professional Working

CERTIFICATIONS

Certificate of Competence, Geographic Information Systems Manager/Specialist

BNSP (Badan Nasional Sertifikasi Profesi)

GIS Analyst Level 6 & Photogrammetry Level 6

BNSP via LSP ISI

FASI Drone Pilot Certification

Federasi Aero Sport Indonesia

Geospatial Data Analysis Using Python

Digital Talent Scholarship

Technical Expert (Tenaga Ahli)

Sleman Regional Disaster Management Agency (BPBD)

2023–2023

Sleman, Yogyakarta

Geodetic Engineer, Toll Road Planning Division

PT Hutama Karya (Persero)

2022–2023

Jakarta, Indonesia

Assistant Lecturer & WebGIS Developer

Universitas Gadjah Mada & Freelance (BIG, Idealog)

2021–2022

Indonesia

PROJECTS

Trans Sumatra Toll Road WebGIS

2022 - 2023

Development of WebGIS platform for efficiency of toll road planning in Sumatera

- Print map feature
- Download route feature
- Planning visualization

SAKATA - Satu Kalurahan Satu Data

2023 - 2023

WebGIS application for land mapping project in Kulon Progo

- Spatial village data visualization
- Data management system

SITASWIL Redesign

2021 - 2021

Sistem Informasi Batas Wilayah web application redesign for BIG

- Front-end interface redesign
- OSM Nominatim geocoding integration

Prambanan Temple 3D Documentation

2022 - 2023

Research project documenting Prambanan Temple deformation in 3 dimensions

- GPS Geodetic measurement
- Automatic Leveling
- Total Laser Scanner documentation

VOLUNTEERING

Wakil Kepala Departemen Medinfo

2018-09 - 2019-09

Keluarga Mahasiswa Departemen Teknologi Kebumian

- Instagram Feed Design
- Documentation of each activity/work program

Staff Internal Kementerian Keuangan

2019-01 - 2019-12

Badan Eksekutif Mahasiswa

- Handle incoming proposals for the purposes of activities or work programs
- Make a RAB of activity proposals
- Design financial reports every month

Divisi Media dan Informasi KMDG UGM

2019-01 - 2019-12

[Ikatan Mahasiswa Geodesi Indonesia](#)

- Participate in IMGI social activities
- Content design on geomaticaugm social media

Koordinator Mahasiswa

2021-12 - 2022-01

[KKN PPM UGM Bencana Semeru](#)

- Develop a work program to assist in the disaster rehabilitation process in Semeru
- Coordinate with local government agencies such as PMI, Puskesmas, and Polsek
- Help manage disaster relief posts