Liu Purnomo, S.Kom

Drone Expert | Software Engineer

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Jakarta, Indonesia 10210

Online profile

PROFESSIONAL SUMMARY

Drone expert and software engineer with deep experience in UAV operations, pilot training, and production-grade software development. Certified as a remote pilot and trusted as an instructor, he founded PT. Remote Pilot Indonesia (remotepilot.id), a drone and mapping training company that has trained 6,000+ students across Indonesia, combining practical field skill with structured aviation knowledge. His founder, public speaker, and author experience supports the core work through leadership, communication, curriculum design, and practical field insight.

EDUCATION

Universitas Pamulang — **Tangerang, Indonesia**
Master of Informatics Engineering — *2026 - Present*

Hacktiv8 — **Jakarta, Indonesia**
Full Stack JavaScript Immersive Program — *Jan 2023 - Jun 2023*
Score: 97/100, Teacher's Awards Predicate (score > 95)

STMIK Antar Bangsa — **Tangerang, Indonesia**
Bachelor of Informatics Engineering (S.Kom.) — *Sept 2020 - Sept 2024*
GPA: 3.44/4.00, Very Satisfactory

CORE SKILLS

Languages ..... JavaScript, TypeScript, PHP, SQL

Frontend & Mobile ..... React, Next.js, Vue.js, React Native, Tailwind CSS

Backend & Database ..... Node.js, Prisma, PostgreSQL, Redis, REST API

Tools & DevOps ..... Git, Docker, AWS, Vercel, CI/CD

Drone Platforms ..... DJI Multirotor (All Series), Fixed Wing UAV, VTOL UAV

GIS & Mapping Software ..... Agisoft, ArcGIS, PCI Geomatics, Global Mapper

PROFESSIONAL EXPERIENCE

PT. Remote Pilot Indonesia — **Jakarta, Indonesia**
Director & Founder — *Dec 2022 - Present*

- Founded and lead a drone and mapping training company (remotepilot.id): drone pilot certification and aerial mapping programs, with the curriculum, regulatory compliance, and operations.
- Trained 6,000+ students to date through drone pilot and drone mapping programs for government agencies, companies, and individuals across Indonesia.

PT Arta Daya Taruna **Jakarta, Indonesia**

Jr. IT Manager *Jun 2024 - Present*

- Built a Mining Management System (HRIS, Asset, SCM, FMS, Finance) serving 500+ employees, replacing Excel workflows.
- Developed web and mobile apps using Next.js, Express.js, PostgreSQL, and React Native with RESTful APIs, RBAC, and real-time sync.
- Migrated on-premise infrastructure to AWS (EC2, S3, RDS), cutting costs by 20% with CI/CD and zero-downtime deploys.

PT Furindo Sakti Sejahtera **Jakarta, Indonesia**

Full Stack Developer (Contract) *Jun 2023 - Jun 2024*

- Sole developer of a complete ERP covering inventory, procurement, sales, and accounting, shipped within 12 months.
- Reduced manual data entry by 60% across four departments and eliminated all paper-based approval workflows.

Indonesian Aerosport Federation (FASI) **Jakarta, Indonesia**

Drone Instructor (Part Time) *Jan 2019 - Present*

- Built standardized curricula for drone pilot certification covering regulations, airspace rules, and emergency procedures.
- Delivers ongoing instruction for national programs; created digital training materials now adopted at centers nationwide.

CV. Galeri Angkasa Sejahtera **West Kalimantan, Indonesia**

Director & Drone Instructor *Jun 2018 - Dec 2021*

- Founded a drone services company delivering aerial mapping, surveying, and pilot training; trained 4,000+ pilots in total.
- Secured contracts with government ministries, state-owned enterprises, and private companies across Indonesia.

Keling Kumang Group **West Kalimantan, Indonesia**

GIS Expert & Trainer (Project-based) *2016 - 2018*

- Built the GIS and drone mapping capacity of the Keling Kumang Group mapping team, from drone mapping and monitoring training to a GIS Training of Trainers workshop.
- Trained independent oil palm smallholders in participatory mapping in Sekadau and Melawi (with Solidaridad), and village teams in GPS-based participatory mapping in 7 villages of Tempunak Hulu (with MCA-Indonesia).

Perkumpulan Sampan Kalimantan **West Kalimantan, Indonesia**

Head of IT & UAV Program Officer *Mar 2013 - Sept 2016*

- Operated UAVs for aerial mapping, photogrammetry, and field documentation in support of conservation research.
- Built the organization's digital presence from scratch, growing its online following by 3× in two years.

SELECTED PROJECTS & PLATFORMS

Drone Indonesia *Tech: Next.js, Prisma, PostgreSQL, Socket.io, Midtrans, Leaflet, Cesium, Turf.js*

Platform for every drone pilot in Indonesia

Since 2021, drone.co.id has brought 3,500+ registered remote pilots together: portfolios, LMS and QR certificates, DJI flight-record replay in 3D, airspace and NOTAM checks from the official AIP, live ADS-B radar, a GIS workspace, flight planning straight to DJI controllers over WebUSB, realtime chat and Midtrans payments. One API also powers the mobile app and Drone Mapper. SEO built in with JSON-LD in 27 schema.org types.

drone.co.id: https://drone.co.id

Remote Pilot App *Tech: React Native, Expo, TypeScript, Socket.io, Push notifications, Xcode, Gradle*

Native app on the App Store and Google Play

The mobile side of drone.co.id: airspace and NOTAM checks, offline flight plans, logbook, classes, a QR member card, chat and a social feed. Designed, built in React Native and Expo, and taken through Apple and Google review myself, with 31 releases shipped.

App Store: https://apps.apple.com/id/app/remote-pilot-drone-indonesia/id6802988579

Google Play: https://play.google.com/store/apps/details?id=com.remotepilot

Drone Mapper *Tech: C++, OpenMP, GeoTIFF / PROJ, COLMAP, ONNX, Electron, React, MapLibre*

Photogrammetry and GIS desktop app, own C++ engine

Turns drone photos into an orthophoto, a DSM, and a print-ready map in one click. I wrote the occlusion-aware orthophoto engine in C++ (GeoTIFF, PROJ, OpenMP), GCP adjustment with a Helmert fit, satellite co-registration, Sentinel-2 super-resolution with ONNX, and BIG/KLHK map layouts exported as GeoPDF. Ships for macOS (Developer ID signed) and Windows, with plans sold through drone.co.id.

Download: https://remotepilot.id/drone-mapper

Documentation: https://drone.co.id/drone-mapper/docs

Remotepilot.id *Tech: Next.js, TypeScript, pdf-lib, Google Sheets API, Framer Motion*

Company site that turns inquiries into proposals

Website of PT Remote Pilot Indonesia since 2022: training and certification programs, regulation guides, and a generator that turns a short form into the official 24-page proposal PDF. Google Sheets as a zero-cost backend through my own npm package, and JSON-LD in 30 schema.org types for search.

remotepilot.id: https://remotepilot.id

GERAKS *Tech: Next.js, Prisma, PostgreSQL, pdf-lib, ExcelJS, OpenRouter*

Training provider website and back office

geraks.id runs a Jakarta corporate training provider: 942 program pages drafted with an LLM pipeline and validated before publishing, online registration, pre and post tests, and certificates issued in bulk with QR verification.

geraks.id: https://geraks.id

GAS Pelatihan & Sertifikasi *Tech: Next.js, TypeScript, ISR, Tailwind CSS, OpenRouter, TopoJSON*

Training catalogue built for search at scale

pelatihandansertifikasi.com lists 15,754 training and BNSP certification programs, each with its own page, schedule and JSON-LD in 30 schema.org types. Typed content, an LLM drafting pipeline constrained by code, and incremental static regeneration keep it fast, with a warm editorial design and no UI libraries.

pelatihandansertifikasi.com: https://pelatihandansertifikasi.com

Liupurnomo.com *Tech: Next.js, Prisma, PostgreSQL, TanStack Query, JSON-LD*

Publication and portfolio that ranks on Google

My blog, publication and portfolio since 2011, from Blogspot and WordPress to version 10 on Next.js: categories, tutorials, events, books, inline comments and an AI-assisted editor. Site, CMS and API run as one Next.js app with Prisma and PostgreSQL, with the old Express backend folded in. Articles rank on page one of Google and are cited in Google AI Overviews.

liupurnomo.com: https://liupurnomo.com

Djati *Tech: Next.js, React Native, Node.js, PostgreSQL, AWS*

Mining management system

Runs a mining contractor of 500+ employees from head office to pit: hourly dispatch with an offline field app, weighbridge, fuel ratio against production, maintenance from damage report to closure, procurement from MR to PO with 10,660 tracked lines, HSE forms and mine permits, HR and finance. Configurable approval routing across 25 roles and 371 permissions, offline-tolerant dispatch and employee portals, and an HSE app on Google Play.

Documentation: https://djati.net/docs

Google Play: https://play.google.com/store/apps/details?id=net.djati.hse

Blog.drone.co.id *Tech: Hugo*

Static blog on drones and UAV operations

Hugo-based static blog covering drones, aviation regulations, and UAV operations in Indonesia. Lightweight and fast, published as a static site with no server-side backend.

blog.drone.co.id: https://blog.drone.co.id

NPM Packages *Tech: TypeScript, Node.js*

Open Source Projects

A collection of npm packages built and maintained for the developer community, covering Indonesian number formatting, text abbreviation, and Google Sheets CRUD.

angka-terbilang-ts: https://www.npmjs.com/package/angka-terbilang-ts

unique-abbr: https://www.npmjs.com/package/unique-abbr

indo-format: https://www.npmjs.com/package/indo-format

google-sheet-crud: https://www.npmjs.com/package/google-sheet-crud

PUBLICATIONS

Drone *CV. Diva Pustaka, 2025*

ISBN:978-634-7600-71-4 *Purbalingga*

Covers the fundamentals of drone technology: history, aerodynamics, flight principles, and control systems.

The Remote Pilot *CV. Diva Pustaka, 2026*
ISBN:978-634-7600-76-9 *Purbalingga*
Aviation discipline and airmanship for remote pilots, covering the mindset that separates safe operators from true professionals.

Seni dan Filosofi Penerbangan Drone *Adab Indonesia Grup, 2026*
ISBN:978-634-276-215-8 *Indramayu*
Professional drone operations: regulations, ethics, situational awareness, and in-flight decision-making.

DIGITAL PRODUCTS

Complete Drone Mapping SOP Bundle lynk.id
12 ready-to-use operational documents for drone mapping workflows
Eight technical SOPs plus four business templates: proposal, pricing guide, work order, and survey report. All in editable DOCX format.

Drone Safety & Compliance Kit lynk.id
HIRA/JSA, IMSAFE, GO/NO-GO, Toolbox Briefing, Near-Miss Report
Complete safety document pack for drone ops: risk assessment, IMSAFE, GO/NO-GO, toolbox briefing, and incident report. DOCX and PDF formats.

Drone Flight Permit Document Kit lynk.id
Ready-to-fill templates for official flight permit applications
All supporting documents for drone flight permit applications in Indonesia, compiled from direct permitting experience. Ready to fill in.

Drone Parts Replacement & Inspection SOP lynk.id
Practical guide on when and why to replace drone components
Field-tested guide on when and why to replace drone parts, not just whether it can still fly. Drawn from 13+ years of fieldwork. Editable DOCX.

RPC CBT Exam Question Bank lynk.id
Remote Pilot Certificate exam prep with 1,239 multiple-choice questions
1,239 multiple-choice questions covering 12 aeronautical knowledge modules, based on the official SPUKTA manual. Includes answer keys.

CERTIFICATIONS, AWARDS & CREDENTIALS

Professional

Badan Nasional Sertifikasi Profesi (BNSP) *Jul 2021*
Master Instructor / Trainer
Certificate:8549.2351.0005814.2021

Indonesia Excellent Education for Excellent Life (IEEEL) Institute *Mar 2021*
Certified Public Speaking (CPSP)
Certificate:CPSP-180032021

Dilatih.co *Jul 2022*
Certified Social Media Strategy (CSMSP)
Certificate:3/CSMSP-1/DC/VII/2022

Drone & Aviation

DKUPPU, Kementerian Perhubungan RI *Jun 2022*
Remote Pilot Certificate
Certificate:Sidopi RPC

Federal Aviation Administration (FAA) *Feb 2022*
Part 107 Small UAS Initial
Certificate:1288309-20220218-00451

Federasi Aerosport Indonesia (FASI) *Oct 2019*
Remote Pilot License (RPL) Course
Certificate:05.19.011/RPL/2019

Federasi Aerosport Indonesia (FASI) *Jul 2019*
Basic Remote Pilot (BRP) Course
Certificate:03.19.032/BRP/2019

Asosiasi Pilot Drone Indonesia (APDI) *Jul 2018*
Pilot Drone Certificate
Certificate:Reg. No. 0090-2018

PT Byte Geo Solusi *Aug 2020*
Trinity F90+ Aerial Tactical Mapping
Certificate:QS.IDN: 015.BGS.020

Technology

IBM *Apr 2026*
Build an AI Agent
Certificate:c3fe46db-635a-40ae-b34f-2eded382bf74

Hacktiv8 Indonesia *Jun 2023*
Fullstack JavaScript Immersive
Certificate:Teachers Awards Predicate

Ministry of Communications and Information Technology, RI (KOMINFO) *2020*
Programming: HTML, CSS, JavaScript
Certificate:NO.0447677201-4

Progate *May 2020*
Web Development Path (Node.js)
Certificate:e895f0bbq9n3wz

Hacktiv8 *Dec 2022*
HTML & CSS Fundamentals
Certificate:UC-a00f1503-4369-4965-98dc-07e2f9009b98

Speaker & Awards

Ministry of Defense, Republic of Indonesia *Jun 2022*
Guest Speaker, National Defense Seminar
Certificate:Credential

Halim Perdanakusuma Air Force Base *Aug 2022*
Guest Speaker, National Defense Training
Certificate:Credential

Batu City Regional Disaster Management Agency (BPBD) *Mar 2019*
Instructor, Drone Technical Training
Certificate:02.B01.KL.422.204.2019

West Kalimantan Bloggers Community *Jul 2016*
3rd Place, SEO Blogger Contest
Certificate:Credential

MTQ, Sekadau Regency *Jan 2010*
1st Place, Fahm al-Quran Competition
Certificate:50/PAN.MTQ-SKD/2009

20 RECENT EVENTS & SPEAKING

PT Hengjaya Mineralindo *Oct 2026*
Hotel Amaris Kemang *Jakarta*
Instruktur untuk Pelatihan dan Sertifikasi Remote Pilot PT Hengjaya Mineralindo

BPDLH - Kementerian Keuangan *Sep 2026*
Hotel 101 Tugu, Jogjakarta *Jogjakarta*
Instruktur Untuk Refreshment Penggunaan Drone untuk Pemetaan dalam rangka Monev program Norway's Contribution on the Implementation of FOLU Net Sink 2030.

BPDAS Krueng Aceh, Kementerian Kehutanan *Sep 2026*
Hotel Atria Gading Serpong *Tangerang*
Instruktur untuk Pelatihan dan Sertifikasi Remote Pilot untuk Tim BPDAS Krueng Aceh

PT Masmindo Dwi Area *Sep 2026*
Serpong, Banten *Tangerang Selatan*
Pelatihan dan Sertifikasi Remote Pilot PT Masmindo Dwi Area

Gesit Natural Resources, PT Mandara Prima Nusantara, PT Dinamika Sejahtera Mandiri dan PT Sigma Prima *Aug 2026*
Office PT Mandara Prima Nusantara *Sanggau*
Instruktur Pelatihan Pilot Drone Pemetaan Untuk Gesit Companies

PT Singkep Timas Utama X PT Cipta Persada Mulia *Jul 2026*
Kantor PT Singkep Timas Utama *Kepulauan Riau*
Instruktur Pelatihan Drone dan Akuisisi LiDAR PT Singkep Timas Utama dan PT Cipta Persada Mulia

Indonesia Outdoor Festival 2026 *Jun 2026*
Hall B JCC Senayan *Jakarta*
Moderator untuk Indofest 2026 : Drone Evolution, Sahabat Baru Penjelajah Rimba

Kementerian Lingkungan Hidup *Feb 2026*
Avenzel Hotel and Convention Cibubur *Cibubur*
Instruktur dalam Pelatihan dan Sertifikasi Remote Pilot Kementerian Lingkungan Hidup

Kementerian Keuangan - Badan Pengelola Dana Lingkungan Hidup *Nov 2025*
Hotel Mercure Gatot Subroto, Jakarta *Jakarta*
Instruktur untuk Pelatihan dan Sertifikasi Drone Proyek Norway’s Contribution for The Implementation of FOLU Net Sink 2030

Badan Gizi Nasional x FASI *Nov 2025*
Wisma Makara - Universitas Indonesia *Depok*
Instruktur untuk Basic Remote Pilot Course 67 FASI x Badan Gizi Nasional

PT. Jasa Marga (Persero) Tbk x Diorama Training *Sep 2025*
Jasamarga Tollroad Command Center *Jakarta*
Instruktur dalam Kegiatan Pemetaan Udara menggunakan Drone Multirotor

Kementerian Dikti Saintek x FASI *Sep 2025*
Online Zoom Meeting *Jakarta*
Narasumber Dalam Kegiatan Pembekalan Junior Remote Pilot Training 1-2025 Untuk Kontes Robot Terbang

BPA Institute x Diorama Training *Sep 2025*
Online Zoom Meeting *Jakarta*
Instructor of Basic ArcGIS Geographic Information System (GIS) Training for Architecture

Kementerian Keuangan - Badan Pengelola Dana Lingkungan Hidup *Jul 2025*
Wisma Aldiron, Jakarta *Jakarta*
Instruktur Training Drones For Surveying

Diorama Training x PT. Perkebunan Nusantara I Regional 2 *Apr 2025*
Hotel Amaris La Codefien Kemang, Jakarta Selatan *Jakarta*
Instruktur Training Drone Pemetaan dan Arcgis

Kementerian Komunikasi dan Digital *Dec 2024*
Hotel Mercure Harmoni, Jakarta Pusat *Jakarta Pusat*
Instruktur Training Sinematografi Drone Professional

Hacktiv8 Indonesia *Dec 2024*
Kampus Hacktiv8 Pondok Indah *Jakarta Selatan*
Narasumber Kegiatan Fox Talks 2024

Politeknik Elektronika Negeri Surabaya *Aug 2024*
Politeknik Elektronika Negeri Surabaya *Surabaya*
Instruktur Pelatihan Drone Untuk Pemetaan

Balai Wilayah Sungai Kalimantan III, Kementerian PUPR *Mar 2024*
Balai Wilayah Sungai Kalimantan III *Banjarmasin*
Instruktur Peningkatan Kapasitas Petugas dalam Pengoperasian Alat Drone RTK dan Pengolahan Data Topografi

Dinas Perhubungan DKI Jakarta *Dec 2022*
Dinas Perhubungan DKI Jakarta *Jakarta*
Instruktur dalam Training Drone Untuk Unit Pengelola Sistem Pengendalian Lalu Lintas