

Gede Bagus Krishnanditya Merta, S.Kom.

ML/AI Engineer | Software Engineer

Bandung, Indonesia | [+62 85847990203](tel:+6285847990203) | baguskrishnanditya@gmail.com | linkedin.com/in/baguskrishna | [Portfolio](#)

SUMMARY

Summa Cum Laude Informatics graduate (GPA: 3.96/4.00) from Telkom University with strong expertise in machine learning, computer vision, and data science, complemented by multiplatform software engineering versatility. Published IEEE author experienced in building production ML pipelines, on-device iOS intelligence (CoreML), and data-driven systems. Proven ability to bridge technical complexity with multidisciplinary collaboration to create high-impact, user-centered digital solutions.

EDUCATION

Apple Developer Academy

Infinite Learning, Batam, Indonesia

Mar 2026 - Present

- Intensive program covering iOS application development, human-centered design principles, and on-device CoreML machine learning integration.
- Relevant Studies: iOS Application Development, CoreML & Vision Framework On-Device Machine Learning, Human-Centered Design (HCD), Swift & SwiftUI, Agile Team Collaboration.

Bachelor of Degree in Informatics - Summa Cum Laude (GPA 3.96/4.00)

Telkom University, Bandung, Indonesia

Aug 2022 - Jan 2026

- Thesis: Multimodal Information Credibility on Social Media X Using a Hybrid CNN-BiGRU with Particle Swarm Optimization (Published in IEEE, DOI: [10.1109/ICICyTA68677.2025.11362759](https://doi.org/10.1109/ICICyTA68677.2025.11362759)). Fused text and visual embeddings across 5 evaluation scenarios.
- Relevant Coursework: Machine Learning, Artificial Intelligence, Data Science, Computer Vision, Swarm & Evolutionary Computation, Platform-Based Application, Data Structures, Algorithm Programming, Database Systems, Linear Algebra, Statistics.

WORK EXPERIENCE

Learner iOS Developer

Apple Developer Academy - Infinite Learning, Batam, Indonesia

Mar 2026 - Present

- Developed 4 native Apple platform applications using Swift and SwiftUI, applying Human-Centered Design (HCD) and agile team collaboration.
- Collaborated within large, multidisciplinary teams (up to 10 members in Challenge 4), practicing active team empathy, iterative user research, and rapid prototyping.

AI/Software Intern

PT Salam Pacific Indonesia Lines (SPIL), Jakarta, Indonesia

Sep 2025 - Dec 2025

- Ship Operation System: Developed dashboard and data input pipeline for cargo calculations, port schedules, and voyage tracking with ML load forecasting.
- Early Medical Warning: Engineered safety alert system analyzing weather and port health records for maritime crew risk mitigation.

Data Analyst Intern

PT Telkom Indonesia, Direktorat Digital Business, Bandung, Indonesia

Jun 2025 - Sep 2025

- Bridged agronomic domain experts and informatics within a multidisciplinary team to synthesize farmer fieldwork observations into formal software requirements (SKPL via TLADS methodology).
- Designed Greenhouse Decision Support System (DSS) dashboard architecture incorporating real-time climate sensor monitoring, crop cultivation logging, yield prediction modeling, and transparent farmer profit-sharing (SHU).

Front End Mentee

PT Telkom Indonesia, Digistar Class 2024, Jakarta, Indonesia (Online)

Aug 2024 - Oct 2024

- Mastered front-end web development fundamentals using React.js, including React components, React Router, Hooks (useState, useEffect), and component lifecycles.
- Executed a capstone project for Telkom Indonesia subsidiary BigBox by building an XLS-to-JSON data converter as Front-End specialist, winning Best Project Team among 100+ teams.

Tentor Community

Himpunan Mahasiswa Telkom University, Bandung, Indonesia

Sep 2024 - Jan 2025

- Mentored 2 study groups of freshman Informatics students (Class of 2024, 5 students per group, total 10 students) to strengthen core programming fundamentals.
- Conducted weekly mentoring sessions across a 5-week intensive program leading up to mid-semester exams, teaching Golang fundamentals (conditional logic if-else, loops, functions/subprograms, and arrays).

Mobile Programmer Internship

Mobile Innovation Laboratory, Telkom University, Bandung, Indonesia

Dec 2023 - Mar 2024

- Performed front-end UI slicing in Flutter, working with state management, navigation, and widgets.
- Learned API integration, CLI GET requests, and Firebase authentication/database for mobile apps.

Practical Assistant

Informatics Laboratory, Telkom University, Bandung, Indonesia

Jan 2024 - Jun 2025

- Mentored 200+ undergraduate students across core computer science practicums, covering foundational Python/NumPy/Pandas in Basic AI, advanced data structures (trees, graphs, linked lists) in C++, and algorithmic logic in Golang.

- Collaborated with 20+ laboratory assistants, candidate assistants, and laboratory staff to coordinate weekly practicum schedules, grading evaluations, assistant recruitment, and computing environment setup.

PROJECTS

[RONA - On-Device AI Acne Detection & Recovery Tracking](#)

2026

Portofolio / Apple Developer Academy (Challenge 4)

- Trained YOLO11s on a dataset of 14,630 clinical images (11,240 train, 2,018 val, 1,372 test) containing 101,730 bounding box annotations across 6 acne classes (papule, pustule, blackhead, nodule, cyst, whitehead).
- Exported model to CoreML with polygon-normalized parameters and on-device NMS, processing 3-angle facial scan captures (front, left, right) for localized skin scoring and side-by-side recovery comparison.

[Footsal - Real-Time Smart Sports Analytics App](#)

2026

Portofolio / Apple Developer Academy (Challenge 3)

- Deployed YOLOv8/v11 pretrained model (COCO dataset) for real-time live camera feed sports ball detection and frame-by-frame tracking, converting to CoreML and tuning confidence thresholds in SwiftUI.

[WattWise - Shared-Apartment Power Budgeting App](#)

2026

Portofolio / Apple Developer Academy (Challenge 2)

- Engineered an iOS energy management app allowing shared-apartment (rusun) residents to allocate and monitor device-level electricity quotas within monthly budgets.

[BodyCraft - iOS & watchOS Interactive Fitness Companion](#)

2026

Portofolio / Apple Developer Academy (Challenge 1)

- Built an interactive iOS and watchOS fitness app utilizing Apple HealthKit API for real-time heart rate and active calorie tracking.

[Tomato Leaf Disease Detection \(YOLOv8 vs YOLOv9\)](#)

2024

Portofolio / Computer Vision Project, Telkom University

- Benchmarked YOLOv8s and YOLOv9s across 10 disease classes on 10,825 images (augmented to 15,154 images). YOLOv9s achieved 92.74% Precision and 92.81% F1-score; deployed via Streamlit.

[BizzGrow - Multiplatform Sales Forecasting & Sync System](#)

2024

Portofolio / Platform-Based Application Project, Telkom University

- Built and deployed an XGBoost Regressor (100 estimators) via Flask REST API with Warm Start incremental retraining on sliding-window time-series data (90% train / 10% test) for automated per-item sales demand forecasting.
- Engineered bidirectional real-time data synchronization between Flutter mobile app and React web dashboard via Google Cloud Firestore (Firebase).

[Swarm Computation - Selection Feature Implementation](#)

2024

Portofolio / Swarm & Evolutionary Computation Project, Telkom University

- Implemented Particle Swarm Optimization and Genetic Algorithm from scratch in Python to optimize SVM hyperparameters on Wisconsin Breast Cancer dataset (569 samples, 30 features), achieving 92.32% Accuracy (PSO) and 92.05% Accuracy (GA) over default baseline (82.81%).

[Suicidal Tweets Detection & NLP Classification](#)

2024

Portofolio / Artificial Intelligence Project, Telkom University

- Constructed NLP sentiment pipeline using TF-IDF feature extraction, Decision Tree, and Multinomial Naive Bayes classifiers; optimized with Grid Search (89.23% best CV score) and Bayesian Optimization for 90.0% test accuracy.

ORGANIZATIONAL EXPERIENCE & LEADERSHIP

[Documentation and Publication Division](#)

May 2023 - Oct 2023

Java Business Competition - UKM SEARCH, Telkom University

- Managed digital media publications and official Instagram account communications for Java Business Competition (@jbc_telkomuniv).
- Designed promotional visual content and handled Instagram feed publication for Championship Regeneration (@crsearch2023).

[Head of Section IX - Documentation and Publication](#)

Jan 2020 - Jan 2021

OSIS & MPK SMANDAPURA, SMA Negeri 2 Amlapura

- Directed media documentation and visual publications for all official school events, managing annual divisional work plans and budgeting.
- Managed official school digital channels (Instagram: @osismpk_smandapura, YouTube: @Smandapura) to broadcast school event documentations.

AWARDS & HONORS

- [P2MW Awardee \(2024\)](#): Recipient of Funding for the 2024 P2MW Program in Services, Tourism, and Trade. Our business, Eleganza, highlights the heritage of traditional Indonesian attire through a modern, sustainable fashion-rental concept.
- [Best Project Team, Digistar Class \(2024\)](#): Executed a real-world use case for Telkom Indonesia subsidiary BigBox - building an XLS-to-JSON converter as Front-End specialist, collaborating with UI/UX, Back-End, and PM. Team won Best Team among 100 competing teams.

CERTIFICATIONS

- [Udemy - Machine Learning \[A-Z\]: AI, Python & R Course \(2025\)](#): Completed theoretical and hands-on training covering regression, classification, clustering, and deep learning using Python and R.
- [Microsoft Azure AI Fundamentals \(AI-900\) \(2025\)](#): Certified in foundational AI/ML concepts and their implementation on Microsoft Azure (Azure ML, Cognitive Services, Responsible AI).

- [IBM - Code Generation and Optimization Using IBM Granite \(2025\)](#): Gained practical skills using IBM Granite models for code generation and code optimization.
- [Dicoding - Basic Python Programming \(2025\)](#): Covered core Python concepts including libraries, data types, control flow, functions, and OOP.
- [Dicoding - Basic Data Visualization \(2025\)](#): Gained proficiency visualizing data in Python using Matplotlib and Seaborn.
- [Tempat Belajar - Mini Graphic Design Course \(2023\)](#): Completed a comprehensive mini-course covering essential design principles and techniques.

SKILLS

- **AI & Machine Learning:** Python, PyTorch, TensorFlow, YOLO, CoreML, Scikit-learn, Pandas, NumPy, NLP, Computer Vision, LLM Integration.
- **Software & Cloud:** Flutter, SwiftUI, React.js, Node.js, Flask, PostgreSQL, MySQL, Google Cloud Firestore (Firebase), Streamlit, Git, Jupyter
- **Languages:** [English \(EPRT Score: 527 - Professional Proficiency\)](#), Indonesian (Native)
- **Soft Skills:** Agile Collaboration, Problem Solving, Growth Mindset, Communication & Collaboration, User-Centered Research, Adaptability.