

Putu Gede Pradana Adnyana

Bali, Indonesia | work.pradanaadn@gmail.com | 0812-3737-4363 | pradanaadn.github.io
linkedin.com/in/pradanaadn | github.com/pradanaadn

Summary

Python Developer with **4+ years** hands on experience specializing in data science, machine learning, and AI engineering. Experienced in building scalable data pipelines, deploying ML models, and optimizing APIs for business insights. Strong in SQL/PostgreSQL, FastAPI, and cloud deployment. Willing to work on-site in Karawaci, Tangerang.

Education

Udayana University, S.T. in Electrical and Computer Engineering – Bali, Indonesia Sept 2020 – Aug 2024

- GPA: 3.97/4.0 ([Transcript](#))
- Relevant Coursework: Calculus, Statistics, Big Data, Machine Learning, Computer Vision, Databases

Mastering AI Bootcamp by Skill Academy, in AI Engineering – Online Mar 2024 – June 2024

- GPA: 90/100 ([Transcript](#))
- Relevant Coursework: Python, Data Cleaning, Data Visualization, Statistics, Linear algebra and Calculus, Machine Learning, Deep Learning, CNN and Computer Vision, PyTorch, NLP and Transformer, MLOps

Bangkit Academy by Google, Gojek, and Tokopedia, in Machine Learning – Online Feb 2023 – June 2023

- GPA: 95/100 ([Transcript](#))
- Top 5% of 5,000+ participants.
- Relevant Coursework: Python, Data Analytics, Mathematics for Machine Learning (Linear Algebra, Calculus), Machine Learning, Deep Learning with Tensorflow, ML Deployment

Certification

- TensorFlow Developer Certificate
- Microsoft Certified: Azure AI Engineer Associate

Experience

AI/ML Engineer (Contract), WWaste PTE. LTD – Bali, Indonesia July 2025 – present

- Built and deployed ETL pipelines for LLM context enrichment and insight generation, leveraging Langchain to transform large datasets into actionable business decisions.
- Developed and deployed time series forecasting (ARIMA, SARIMA, Prophet, LightGBM, XGBoost) for user waste generation, achieving RMSE of 1.2.
- Created and deployed object detection models for waste category (YOLO with mAP50 95%) and brand detection (zero-shot classification) on AWS SageMaker, including data collection and training.
- Integrated LLM observability (Langfuse), optimized REST API (FastAPI) with Redis caching, reducing token usage by 90% and response time by 99.7%.

Machine Learning Engineer Intern, PT. Adamata Indonesia – Tangerang, Indonesia Jan 2025 – June 2025

- Developed Bottle Cap Color Sorter software using Two Stage Object Detection, achieved latency under 35 ms with a 90% pick rate.
- Researched and implemented a Lightweight Object Detection model (Nanodet) for Bottle Cap Color Sorted.
- Optimized object detection with various run-time optimizations, including quantization and pruning, to improve performance on edge devices.
- Automated the deployment process on Raspberry Pi using Ansible, reducing deployment time by 50%.
- Gathered and Annotated datasets from the production line and trained models to improve accuracy and performance.

AI Engineer Intern, Ruang Guru – Jakarta, Indonesia Sept 2024 – Dec 2024

- Developed a web application for centralized various AI models, to be used by internal teams.
- Developed REST API for code generation and autocomplete and integrated with open-source coding assistant.

- Implemented CI/CD pipelines to automate the deployment process, reducing deployment errors by 25% and enhancing system reliability.
- Conducted performance testing and optimization, achieving a 30% reduction in response time for API endpoints.
- Documented the API endpoints and guides to set up the coding assistant, improving developer onboarding and usage.

Product Development Intern, X-Camp by XL Axiata – Jakarta, Indonesia July 2024 – Aug 2024

- Contributed to integration of RTSP cameras for object detection and optimized multithreaded data processing using CUDA, improving system performance by 40% and enabling real-time analytics.
- Led data collection and labeling for training datasets for object detection.
- Configured MQTT protocols and integrated them with ThingsBoard, ensuring seamless data communication and system reliability.

Projects

Teman Wisata 2025

Tourism recommendation system deployed on Biznet Gio Cloud.

- **Tools:** Python, Pytorch, MLFlow, Redis, Supabase, Scikit-learn, Fastapi, Docker, K3S, Typescript, Tailwindcss, Daisyui, Alpinejs, Vite

SafeFlood 2025

Predictive flood monitoring and management system using Machine Learning and Google Earth Engine.

- **Tools:** Python, Google Earth Engine, Reflex, Leaflet JS, Scikit Learn, Tensorflow, Github Action

Trash Object Detection - AI-Based Waste Audit and Assistant 2024

A Hackathon project that aims to help people to sort their waste properly.

- **Tools:** Python, OpenCV, Alibaba Cloud, Ultralytics, Streamlit

UmMeals – Maternal and Child Nutrition App 2024

A Hackathon project that aims to help monitoring maternal and child nutrition.

- Achieved Top 6 in Microsoft Innovation Challenge 2024.
- **Tools:** Python, Microsoft Azure AI, Power BI, and Streamlit

Skills

Programming Languages: Advanced: Python, SQL; **Intermediate:** C++ , JavaScript, Bash, PHP, TypeScript

Data Science & Machine Learning: Pandas, NumPy, SciPy, scikit-learn, PyTorch, TensorFlow, Keras, XGBoost, LightGBM, MLflow, CometML, Huggingface Transformers, OpenCV, OpenVINO

Backend & API Development: FastAPI (async), Flask, REST API, Docker, Redis

Database Management: PostgreSQL, Supabase, MySQL, MongoDB

Cloud & MLOps: AWS SageMaker, Google Cloud, Microsoft Azure, Vertex AI, Ansible, GitHub Actions, CI/CD

Engineering Practices: pytest, mypy, ruff, black, Git, Linux

Visualization & Web: Streamlit, Gradio, Power BI, Leaflet.js

Soft Skills: Teamwork, Communication, Analytical Problem-Solving, Adaptability, Project Management, Fast Learner

Languages: Bahasa Indonesia (Native), English (Professional Working Proficiency)