Putu Gede Pradana Adnyana

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Summary

AI Engineer with nearly one year of intensive internship experience and specialized training in Machine Learning. Proven ability in developing and deploying high-performance object detection models, such as a Bottle Cap Color Sorter achieving under 35ms latency on edge hardware. Expertise includes implementing lightweight object detection architectures and leveraging run-time optimizations like quantization and pruning to ensure efficient model performance on resource-constrained devices.

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

Mastering AI Bootcamp by Skill Academy, in AI Engineering - Online

Mar 2024 - June 2024

- GPA: 90/100 (<u>Transcript</u>)
- 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 (<u>Transcript</u>)
- 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

Experience

AI/ML Engineer (Contract), WWWaste PTE. LTD – Bali, Indonesia

July 2025 - present

- Built and deployed data insight pipelines with Langchain, enabling actionable business decisions from large datasets.
- Developed and deployed time series forecasting (ARIMA, SARIMA, Prophet, LightGBM, XGBoost) for user waste generation, achieving RMSE of 1.2.
- Created object detection models for waste category (YOLO, mAP50 95%) and brand detection (zero-shot classification), 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 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

Resume Perfector 2025

Agentic AI-based resume optimization tool that helps users to improve their resumes.

• Tools: Python, llamaindex, Vertex AI, Pydantic

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

<u>UmMeals - Maternal and Child Nutrition App</u>

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; **Intermediate:** C++, Javascript, Bash, SQL, PHP, **Beginner:** Golang, Java

Machine Learning Modeling: Pytorch, Tensorflow, Keras, Scikit-learn, Huggingface Transformer, OpenCV, Openvino, LiteRT

Machine Learning Deployment: Docker, Ansible, Google Cloud, Microsoft Azure API and Web Development: FastAPI, Flask, Streamlit, REST API, Laravel, Django

Databases: MySQL, PostgreSQL, SQLite, MongoDB, ChromaDB

Tools and Technologies: Git, Github Actions, Linux

Soft Skills: Teamwork, Communication, Problem Solving, Adaptability, Time Management, Project Management

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