

Putu Gede Pradana Adnyana

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Summary

Innovative Computer Engineering graduate with 1+ year of experience in AI-powered solutions and scalable software development. Proficient in Python with 4 years of experience and a strong background in deploying machine learning models, optimizing systems, and implementing cutting-edge technologies. Successfully contributed as an Artificial Intelligence Engineer Intern at Ruangguru, enabling seamless LLM access for all stakeholders. Willing to relocate for opportunities that align with my skills and career goals

Education

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

- **GPA:** 3.97/4.0 ([Transcripts](#))
- **Best Graduates** of the Faculty of Engineering, Udayana University at the 163rd Graduation
- **Coursework:** Discrete Mathematics, Calculus, Data Structure, Computer Architecture, Software Engineering, Machine Learning, Digital Image Processing, Big Data, OOP, Database, Computer Network, Information Technology Project Management

Mastering AI: From Foundations to Applications by Ruangguru, Machine Learning Engineering Mar 2024 – July 2024

- **GPA:** 90/100 ([Transcripts](#))
- **Coursework:** Python, Data Cleaning, Data Visualization, Statistic, Linear algebra and calculus, Machine Learning, Deep Learning, CNN and Computer Vision, Pytorch, NLP and Transformer, MLOps

Bangkit by Google, Goto and Traveloka, Machine Learning Feb 2023 – July 2023

- **GPA:** 95/100 ([Transcripts](#))
- Distinction Graduates, 10% of more than 5,000.
- **Coursework:** Python, Data analytics, Mathematics for Machine Learning (Linear Algebra, Calculus), Machine Learning, Deep learning with Tensorflow, ML Deployment

Technical Skills

Language: Python (Advanced), C++ (Intermediate), Javascript (Intermediate), SQL (Intermediate), Bash (Intermediate)

Data Analysis and Visualization: Pandas, Numpy, Seaborn, Matplotlib, Plotly, Tableau

Machine Learning Modeling: Pytorch, Tensorflow, Sklearn, Huggingface Transformer

Large Language Model: Langchain, VertexAI, OpenAI, Anthropic

API and Web Development Framework: Flask, FastAPI, Django REST API, Laravel

Deployment: Docker, Git, Github Action, Streamlit, Gradio

Cloud Service: Azure AI Service, Google Cloud Platform

Experience

Artificial Intelligence Engineer Intern, Ruang Guru – Jakarta, Indonesia Sept 2024 – Dec 2024

- Led the development of a centralized system integrating AI models such as OpenAI, Gemini, and Anthropic, streamlining access for product and development teams.
- Developed REST API endpoints for a Coding Assistant, improving engineering team access.
- Implemented CI/CD pipelines to automate the deployment process, reducing deployment errors by 25%.
- Optimized system performance by enhancing architecture, resulting in a 30% increase in efficiency.
- Collaborated with cross-functional teams to ensure the scalability and reliability of IT solutions in dynamic environments.
- Showcased expertise in system optimization, driving improvements in reliability to support Ruang Guru's digital transformation initiatives.

- Contributed to the 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 research on deploying YOLO models on Jetson Nano for object detection, enhancing speed and accuracy in AI-driven solutions.
- Configured MQTT protocols and integrated them with ThingsBoard, ensuring seamless data communication and system reliability.
- Improved scalability of monitoring systems through optimized architecture and AI deployment strategies.
- Delivered a 30% improvement in task execution speed, aligning with XL Axiata's goals for digital transformation and operational efficiency.

Certification

TensorFlow Developer Certificate [🔗](#), Microsoft Certified: Azure AI Engineer Associate [🔗](#)

Soft Skills

Project Management, Communication, Agile development, Time management, Problem Solving, Data Analytics, Leadership, Continuous learning, Cross-Functional Collaboration, Data-driven Mindset

Language Proficiency

Indonesia (Native), English (Proficient, TOEFL ITP Score >500) [[Certificate](#) [🔗](#)]

Projects

Trash Object Detection - AI-Based Waste Audit and Assistant

([Project Presentation](#) [🔗](#))

- Tackled waste management issues in Bandung, addressing landfill sites exceeding 800% capacity, with AI-powered detection and monitoring solutions.
- Developed Catch The Trash, achieving 92% precision using YOLOv8 to classify waste types and provide actionable reuse recommendations.
- Created MamangHijau, an interactive chatbot powered by Qwen-MAX, to educate users on waste handling, regulations, and utilization.
- Designed a real-time dashboard to monitor waste quantities and types, enabling data-driven decisions for government and enterprise users.
- Provided actionable insights, such as identifying 60% organic waste, leading to better infrastructure planning like composting facilities.
- Tools Used: Python, Streamlit, Alibaba Cloud, Ultralytics, OpenCV

COVID-19 Detection via Chest X-rays

([Project Repository](#) [🔗](#))

- Tackled the challenge of automating COVID-19 detection using chest X-rays with a deep learning model.
- Led the development and training of a CNN model using PyTorch and a fine-tuned ResNet-50 architecture.
- Preprocessed images (224x224 size, normalized, augmented) and implemented training with Adam optimizer and cross-entropy loss.
- Achieved 92% validation accuracy after 10 epochs by fine-tuning pretrained layers.
- Built a scalable pipeline for real-time predictions with confidence scores on unseen data.
- Tools Used: Python, Pytorch, Transformer, Gradio

UmMeals – Maternal and Child Nutrition App

([Project Repository](#) [🔗](#))

- Developed an app supporting nutrition tracking for pregnant women and toddlers, featuring personalized monitoring and early stunting detection to provide better health insights.
- Managed all project phases from ideation and research to design and deployment, resulting in selection as a top 6 finalist out of 15 teams in the Skilvul, Biji-biji Initiative, and Microsoft Innovation Challenge 2024.
- Utilized Python, SQL with ORM using SQLAlchemy, Streamlit, Microsoft Azure AI, and Power BI to enhance app functionalities.
- Achieved recognition for innovative solutions and impactful design in the nutrition tracking domain, contributing to improved health outcomes.
- Tools Used: Python, SQL with ORM using SQLAlchemy, Streamlit, Microsoft Azure AI, Power BI