Angly Khan Surya

AI & Software Engineer

Jakarta, Indonesia · anglykhan07@gmail.com · linkedin.com/in/anglykhan · github.com/LyKhan77

SUMMARY

AI & Software Engineer who owns projects from R&D to deployment, building computer vision and generative AI applications for factory and office operations. Turns manual monitoring, inspection and data entry into automated systems with dashboards, alerts and evidence records. Wraps open-source AI models (vision-language, OCR, image and 3D generation) into internal tools, and deploys them on servers, local GPUs and edge devices. Keen to explore new use cases such as agentic AI, 3D CAD and architecture design, and ERP systems.

WORK EXPERIENCE

AI & Software Engineer (Contract) — Aug 2025 – Present

PT Graha Sumber Prima Elektronik · Jakarta Barat, Indonesia

- **R&D to end-to-end product ownership:** Open each project with discussion and R&D, then build and ship the full product (backend, AI pipeline, web UI, deployment), mostly individually and sometimes with the dev team.
- **Replaced manual monitoring with CCTV-based vision systems:** Built real-time dashboards for automatic attendance (face recognition), worker zone tracking (object detection and tracking) with clip evidence and Telegram alerts, and surface-defect inspection (segmentation) with QC reports. Replaced manual attendance logging, supervisor visual checks and hand inspection. Surveyed sites, mapped entry/exit and work zones, and wrote the operating SOP.
- **Wrapped AI models into usable internal applications:** Integrated vision-language, OCR, image and 3D generation models behind APIs and web interfaces, so non-technical staff can use them without touching the model. Examples: live CCTV captioning with continuous context, BOM price-list extraction to JSON/Excel with operator review, and image and 3D generation on a local GPU server (deployment, resource upkeep, parameter tuning).
- **Edge and IoT:** Integrate CV workloads with NVIDIA Jetson and Raspberry Pi, and keep up with new LLMs and IoT system design.

AI Engineer, PPE Detection Project (Freelance) — Feb 2025 – Jun 2025

PT Pertamina EP · Cirebon, Jawa Barat, Indonesia

- Led end-to-end development of a CCTV-based PPE detection system that helps supervisors check whether site workers follow PPE SOPs.
- Built the dataset from CCTV footage (LabelImg, CVAT) and ran preprocessing, augmentation and hyperparameter tuning.
- Trained and benchmarked YOLO models, then deployed the best one to a production web and server environment; fine-tuned iteratively to generalize to unseen object variations.
- Built a real-time pipeline from CCTV input to the inference engine and a Flask web client over REST APIs.
- Added Telegram alerts and automated Excel violation reports, so every detection leaves auditable evidence.

UI/UX Designer (Internship) — Jul 2024 – Sep 2024

Diskominfotik Kabupaten Bandung Barat · Padalarang, Indonesia

- Redesigned the UI/UX of the KBB SuperApp and Smart ASN in Figma, applying HCI principles for users from towns to villages.
- Ran user surveys and observations, and turned the findings into prioritized design improvements with developers and end users.

EDUCATION

B.Sc. Computer Science, GPA 3.73/4.00 — 2021 – 2025

Telkom University · Bandung, Indonesia

- Thesis: object detection and event classification on football match video with YOLOv8 and LSTM.

TECHNICAL SKILLS

Computer Vision	Ultralytics YOLO, OpenCV
ML & Generative AI	PyTorch, TensorFlow, Hugging Face, LLM / VLM, vLLM, Ollama, llama.cpp, LangChain, model training and fine-tuning
Edge AI & IoT	TensorRT, ONNX Runtime, NVIDIA Jetson, Raspberry Pi, MQTT
Backend & Databases	Python, FastAPI, Flask, REST API, WebSocket / Socket.IO, SQL, PostgreSQL, MySQL, Redis
Frontend	JavaScript, React, Next.js, Vue.js, Tailwind CSS, Three.js
Deployment & Tools	Docker, Nginx, Linux, Git, go2rtc
Design	Figma, Blender

ACTIVITIES

Member, Photography Organization (UFT), Telkom University — Oct 2021 – Jan 2023