Mohammad Kamal Nawaf

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Education

Institut Teknologi Sepuluh Nopember *Aug 2021 – Aug 2025*
Bachelor's Degree | *Informatics* *Surabaya, Indonesia*

Professional Experience

Software Engineer *Feb 2026 – Present*
Software Palace (PT PASIFIK BARAT LAUT) *Remote*

- Developed the SplitBill mobile application end-to-end, from application architecture and UI implementation to backend integration and production deployment.
- Designed application wireframes and user flows in Figma and translated them into responsive mobile interfaces.
- Deployed SplitBill to the Google Play Store, managing production builds, application signing, release configuration, and store setup.
- Developed backend services using PostgreSQL, implementing authentication, database schemas, API integrations, and Row Level Security (RLS) for secure data access.
- Integrated a VLLM-based OCR workflow to automatically extract structured receipt data, including store information, items, prices, tax, service charges, and totals, and implemented workflows for item assignment and bill splitting.

AI Trainer – Indonesian Language Specialist *Aug 2025 – Jan 2026*
Invisible Technologies *Remote*

- Evaluated Large Language Model (LLM) outputs in Indonesian and English for factual accuracy, grammatical correctness, contextual understanding, instruction following, and personalization.
- Identified model errors and inconsistencies and applied detailed evaluation criteria to improve the quality of AI training data.

Mobile Developer Intern *Jun 2024 – Aug 2024*
Direktorat Pengembangan Teknologi dan Sistem Informasi *Surabaya, Indonesia*

- Migrated the MyITS Office Android application from Java to Kotlin, improving code maintainability and modernizing the Android codebase.
- Collaborated with another developer to plan migration tasks, troubleshoot technical issues, and resolve implementation problems.
- Redesigned and modernized application interfaces to improve usability and user experience.

Projects

Sundanese Script Optical Character Recognition (OCR)

GitHub | Demo

- Developed an end-to-end OCR system that converts images of Sundanese script into Latin text using computer vision, object detection, and sequence-to-sequence natural language processing.
- Trained and evaluated YOLOv8, YOLOv11, and YOLOv12 object detection models, achieving up to 96% mAP for Sundanese character detection.
- Developed an LSTM-based Sequence-to-Sequence transliteration model to convert detected Sundanese characters into Latin text.
- Created and prepared a custom object detection dataset for model training and evaluation.
- Integrated the computer vision and NLP components into a Flask web application for end-to-end OCR inference.

Technical Skills

Programming Languages: Python, TypeScript, JavaScript, Kotlin, Java
Frontend: React, React Native, Next.js
Backend & Databases: Node.js, FastAPI, Flask, REST API, PostgreSQL, MySQL, MongoDB, NoSQL
DevOps & Deployment: Linux, Ubuntu, VPS Deployment, Nginx, PM2, Certbot, SSL/TLS
Tools & Practices: Git, Jest, Unit Testing, Clean Code, Expo, Figma, Claude Code, OpenCode, Neovim
Languages: Indonesian, English: IELTS 8