Ariya Sontrapornpol

Chumphon, Thailand, 86110 | Open to relocating internationally
Tel: +66 91 040 8652 | E-mail: jomariya.son@gmail.com
linkedin.com/in/ariya-sontrapornpol/ jomariya23156.github.io

SKILLS

Programming Languages: Python, SQL, JavaScript, C++, C
MLOps/DevOps: Docker, Kubernetes, Helm, MLflow, ClearML, Git, DvC, Airflow, Prefect, GitHub Actions, Gitlab CI, FastAPI, Flask, Gunicorn, Nginx, Grafana, Prometheus, Evidently, GCP, AWS
Machine Learning: TensorFlow, Keras, PyTorch, Scikit-learn, spaCy
Other: NLP, LangChain, Kafka, Ray, Spark, Streamlit, OpenCV, Postgres, pytest, HTML, CSS, React, React Native

EDUCATION

Mahidol University
Bachelor of Science (B.Sc.) in ICT | Major: Computer Science | Cumulative GPA: 3.41/4.00 (Second Class Honors)

PROFESSIONAL EXPERIENCE

Machine Learning Engineer **Perceptra (Bangkok, TH)** **February 2022 - Present**

Deployed machine learning models to 100+ hospitals nationwide, accelerating cancer detection, to save lives.

Accomplishments:

- Enhanced existing model serving, achieving 3-4x faster inference time by resolving bottlenecks.
- Designed model serving architectures for 14+ disease prediction services (averaging 85%+ AUC) and developed outlier detection pipelines, boosting AUC by 1.7%, sensitivity by 1.6%, and specificity by 2.5%.
- Revised Docker-based ML platform and infrastructure for 35% smaller image size and 3x faster builds.
- Streamlined ML workflow under strict data privacy restrictions, boosting team efficiency and system reliability.
- Optimized CICD pipelines with Gitlab CI, automating testing, builds, and deployment, resulting in faster deployment times and eliminating manual work.
- Introduced MLOps best practices, including data versioning (DvC) and drift detection (Evidently, alibi), translating leading-edge academic research into production-ready solutions.

PROJECTS

Portfolio website: jomariya23156.github.io (for additional information and projects)

Full-stack On-Prem MLOps system for Computer Vision: github.com/jomariya23156/full-stack-on-prem-cv-mlops

“One config, One command” from Jupyter Notebook to serve Millions of users

- Designed, implemented, and containerized a general-purpose on-premises MLOps system for computer vision tasks, streamlining data versioning, reproducibility, deployment, and monitoring.
- Designed with user-friendliness in mind, requiring only one config and one command to launch the entire system.
- Enhanced system reliability and insights by applying research-inspired techniques for data drift detection (image data), GradCAM for explainability, and DeepChecks for data validation.
- Built a robust model serving stack using Nginx, Gunicorn, and FastAPI, streamlining configuration for efficient deployment.

Sales Forecast MLOps at Scale: github.com/jomariya23156/sales-forecast-mlops-at-scale

Highly scalable Cloud-native Machine Learning system for Demand forecasting

- Built the production-grade cloud-native system for demand forecasting supporting on-prem and cloud deployment, distributed model training, and dual-mode (batch and online) inference for diverse workloads.
- Automated model retraining with real-time data streaming (Kafka) to maintain accuracy with up-to-date data.
- Optimized scalability by leveraging Kubernetes, Airflow for orchestration, Ray for distributed training (1,000+ models under 10 mins), and Spark for high-performance data processing and pipelines.
- Automated 15+ image build/push runs with CI/CD (GitHub Actions), streamlining updates across cloud/on-prem.

EzFit (Startup MVP)

Gamification and Multi-user Exercise experience empowered by AI.

- Built and optimized real-time exercise tracking models, achieving 90%+ accuracy across exercises.
- Deployed complex ML models on mobile devices, and developed the cross-platform mobile application.
- Contributed to overall startup strategy, including financial modeling, marketing plans, and securing grant funding through successful pitch presentations.