

CHUA SIOK CHENG

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AI / MACHINE LEARNING ENGINEER

SUMMARY

AI/ML Engineer with hands-on experience in production ML and GenAI systems across OT cybersecurity, localization, dubbing, and AI content automation. Strong in end-to-end delivery: data pipelines, feature engineering, model evaluation, LLM integration, GCP deployment, CI/CD, and workflow orchestration. Available from April 2026.

CORE SKILLS

AI / ML: Time-series forecasting, anomaly detection, feature engineering, model evaluation, NLP, LLM integration, prompt engineering, workflow automation, AI content creation

Frameworks: TensorFlow, PyTorch, Keras, Scikit-learn, XGBoost, LSTM, Prophet, ARIMA, Streamlit, Plotly, Pandas, NumPy

Cloud & DevOps: GCP (Cloud Workflows, Cloud Run, Cloud Build, Artifact Registry, GCS), Docker, GitLab, GitHub, CI/CD, Linux, SSH

Languages: Python, SQL, C, C++

Data & Search: OpenSearch, FastAPI, Alpaca API, Telegram Bot API

PROFESSIONAL EXPERIENCE

AI Engineer — Lifegame

Dec 2025 – Feb 2026 | Singapore

- Built AI-driven localization workflows for short-form film and video content using Google Cloud infrastructure and Cloud Workflows
- Engineered deployment pipelines for automated video dubbing and localization across multiple target languages
- Developed translation adaptation, script preparation, and prompt refinement for high-fidelity multi-language dubbing
- Created avatar-based ad generation pipelines and AI-assisted script creation from Google Play Store app content
- Maintained GitLab version control; refined prompting strategies for localization accuracy and tone consistency

ML / AI Engineer — First Watch OT Cybersecurity

May 2025 – Dec 2025 | Singapore

- Sole ML Engineer — designed and delivered end-to-end ML pipeline for OT network anomaly detection (traffic volume, protocol behavior, communication patterns)
- Automated ingestion of OpenSearch telemetry → structured time-series datasets; implemented preprocessing and feature-engineering for high anomaly signal quality
- Built Streamlit dashboards for anomaly investigation and real-time system-health visibility
- Integrated LLMs to generate analyst-ready natural language anomaly summaries

Data Analyst Intern — Yanmar Singapore

Sep 2024 – Mar 2025 | Singapore

- Built time-series forecasting models for product sales and service demand

- Cleaned, merged, and analyzed multi-source business datasets independently
- Delivered end-to-end analytics project with actionable business insights

SELECTED PROJECTS

theOrangeTrade (Ongoing)

Aggressive algorithmic trading bot system with a multi-strategy engine. Telegram integration for real-time alerts, FastAPI backend, and Streamlit dashboard. Currently paper trading on Alpaca at \$100k — moving to live.

Stack: Python, FastAPI, Streamlit, Alpaca API, Telegram Bot API

AI Content Pipeline (Ongoing)

YouTube content automation across 5 channels, producing 5+ videos per day. Full pipeline: script → storyboard → image → video → audio → publish. Orchestrates Claude, Gemini, DALL-E, Kling, and Veo APIs.

Stack: Claude API, Gemini, DALL-E, Kling, Veo, Python

Automated Video Generation (Ongoing)

AI-assisted workflows for script generation, content assembly, and fully automated video creation covering storyboarding, image generation, video synthesis, and audio integration.

Stack: GenAI, Video Synthesis, Workflow Automation, Python

GenAI Localization / Dubbing / Avatar Ads

AI workflows for translation adaptation, dubbing, and short-form film/video localization. Avatar-based ad generation from app store content.

Stack: GCP, Cloud Workflows, LLMs, Prompt Engineering

OT Network Anomaly Detection

End-to-end ML pipeline for OT cybersecurity: OpenSearch telemetry ingestion → time-series feature engineering → anomaly detection → LLM-powered analyst summaries with Streamlit dashboard.

Stack: OpenSearch, Python, Scikit-learn, Streamlit, LLM

OpenClaw + AI Workflow Setup (Ongoing)

Self-hosted AI tooling environment with cloud-based deployment and workflow automation infrastructure for running local LLMs and multi-step AI pipelines.

Stack: Docker, Linux, CI/CD, Cloud Deployment

EDUCATION

B.Sc. Computer Science in Real-Time Interactive Simulation, Minor in Mathematics

DigiPen Institute of Technology Singapore

Diploma in Marine Engineering

Singapore Polytechnic (Singapore Maritime Academy)