

CHAIKRIT TECHAPLOOG

SENIOR FULL STACK ENGINEER & TEAM LEAD

Chiang Mai, Thailand | (+66) 99 049 5519 | techaploog@gmail.com

Portfolio: www.chaikrit.com | LinkedIn: linkedin.com/in/chaikrit-techaploog/ | GitHub: github.com/techaploog

PROFESSIONAL SUMMARY

Senior Full-Stack Engineer & Team Lead Innovative Engineering Lead with 8+ years of experience architecting scalable web applications and industrial IoT solutions. Expert in the **Next.js ecosystem, TypeScript, and Python**, with specialized proficiency in integrating complex hardware systems (ERP, Cash Management, Weighing Scales) into modern cloud architectures. Proven track record of leading cross-functional teams to deliver regulatory-compliant, high-performance solutions that reduce operational costs and eliminate manual workflows.

TECHNICAL SKILLS

- **Languages:** TypeScript, JavaScript (ES6+), Python, C# (.NET Core), Go, SQL.
- **Frontend:** Next.js, React, TailwindCSS, HTML5, CSS3, Zod
- **Backend & Database:** Node.js, PostgreSQL, MongoDB, Redis, Drizzle ORM, Zod, REST APIs.
- **DevOps & Infrastructure:** Docker, NGINX, PM2, Git, CI/CD Pipelines, Secure Tunneling
- **Specialized Domain:** IoT & Hardware (RS232), **Payment API Integration (SCB)**, Glory Cash Infinity Devices, **MD5 Hashing for Integrity**, Computer Vision (OpenCV, TensorFlow), Microservices

PROFESSIONAL EXPERIENCE

INDEPENDENT FULL-STACK CONSULTANT / SOLUTIONS ARCHITECT | 2025 – Present

Lead end-to-end development, architecture, and deployment of mission-critical business systems for private clients, specializing in regulatory and operational compliance.

- **FPN CRM Platform:** Designed and delivered a **Hybrid Cloud-Local CRM Platform** for real-time purchasing data aggregation across multiple branches. Implemented **OAuth + RBAC** and automatic synchronization to ensure data consistency, centralized reporting, and offline operational resilience.
- **FPN Scale Application (Regulatory Compliance):** Architected a tamper-proof weighing system featuring **RS232** integration with scale devices. Utilized **.NET Core** for secure device communication and implemented real-time data integrity checks using **MD5 Hash Validation** to meet Department of Internal Trade standards and eliminate data fraud.
- **Automated Payment System:** Developed a high-security payment solution integrated with the **SCB Partner Application**. Implemented a microservices architecture, multi-layer JWT authentication, and automated SFTP report downloads, significantly streamlining the financial transfer workflow.

Core Tech: Next.js, TypeScript, PostgreSQL, Drizzle ORM, .NET Core, PM2.

CREATUS CORPORATION LTD. | Senior Lead Developer Jan 2024 – March 2025

- **Engineering Leadership:** Lead two agile engineering teams (Web & C#) in architecting end-to-end enterprise solutions, ensuring code quality, scalability, and adherence to industry compliance standards.
- **IoT & ERP Integration (Cash Management):** Spearheaded the development of a **Real-Time Cash Management Platform**, integrating local *Glory Cash Infinity* machines (CI5, CI10, CI10X, CI50) with cloud dashboards. This achieved 100% data transparency and eliminated human error in cash handling.
- **Real-Time Cash Inventory & Operational Dashboard:** Architected and deployed a **Cloud-Native Dashboard** using **Next.js and MongoDB** that provides clients (CI machine owners) with **real-time visibility** into machine transactions and cash inventory. This intelligence enables proactive decision-making:
 - **Maximizing Uptime:** Allows users to **spot low recycling cash** instantly, preventing "out-of-change" scenarios and ensuring continuous service availability.
 - **Optimized Logistics:** Provides a precise view of machine cash inventory, enabling users to efficiently plan and **reduce unnecessary cash collection trips** to branches.
- **Automated Self-Service:** Delivered an **LPG Self-Ordering Kiosk** integrating SCB PromptPay and QR payments, significantly reducing transaction times and improving customer throughput.

Core Tech: RBAC, Next.js, TypeScript, .NET Core, MongoDB, Redis, Drizzle ORM, Zod, PM2.

TOYOTA MOTOR THAILAND | Senior Supervisor (Full Stack Developer) 2020 – 2023

- **AI & Automation:** Engineered a **QC Inspection System** leveraging Computer Vision (OpenCV, TensorFlow) and IoT data. Reduced manual workload by **50%** and significantly improved ergonomic conditions for the Quality Inspection team.
 - **Cost Reduction:** Built a centralized **Spare Parts & Warehouse Management System** across 3 manufacturing sites. Utilized Python ETL pipelines to forecast inventory needs, reducing inventory holding costs by **over 15 million THB**.
 - **Infrastructure Optimization:** Managed on-premise infrastructure, configuring NGINX load balancing and PostgreSQL replication to ensure high availability for critical logistics applications.
- Core Tech:* Python (Django), React, Next.js, PostgreSQL, Docker, Computer Vision.

TOYOTA MOTOR THAILAND | Senior Supervisor (Parts Logistics & Project Management) 2012 – 2020

- **Data-Driven Decision Support:** Engineered **Python and MSSQL** based inventory simulation models to analyze supply chain scenarios. Presented critical insights directly to **Executive Management (VP/GM level)**, enabling data-backed strategic planning.
- **Workflow Automation:** Led the **digital transformation** of internal reporting. Replaced manual data gathering processes with automated ETL pipelines and **Power BI** dashboards, significantly reducing reporting lead time and human error.
- **Operational Optimization:** Utilized data engineering skills to identify gaps in resource allocation, improving inventory data accuracy by **25%** and optimizing costs across the production plant.

E D U C A T I O N

- | | |
|--|--|
| - Master of Science (M.S.) in Computer Science | <i>Chiang Mai University, Chiang Mai, Thailand : 2009 - 2011</i> |
| - Bachelor of Science (B.S.) in Computer Science | <i>Chiang Mai University, Chiang Mai, Thailand : 2005 - 2009</i> |