

Chalanthorn Chanmathikornkul (Jojo)

📧 jojoclt | 📱 jojochalanthorn | ✉ cltms01@gmail.com | ☎ +886 933483854 | 📍 Taipei, Taiwan | Blog: jojonosaur.us

WORK EXPERIENCE

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Tri Service General Hospital, Digital Medical Center (AI) <i>Android Developer</i> | <i>Taipei, Taiwan</i> 09/2024 – Present |
| Led the complete rewrite and bilingual modernization (Chinese/English) of the TSGH Helper app (100K+ installs), using Kotlin, MVVM, Jetpack Compose, Coroutines, and Flow, including architecture overhaul, localization pipeline, and full Play Store release management (versioning, internal testing, staged rollouts, and production publishing). | |
| <ul style="list-style-type: none">▪ Delivered core features across authentication, appointments, payments, telemedicine, and report viewing.▪ Authentication: Integrated JWT-based authentication with encrypted local storage for secure, consistent sessions.▪ Product Impact & Reliability:<ul style="list-style-type: none">○ Raising Play Store rating from 3.2 to 4.7 stars within months of release.○ Cutting crash rates from 1 % to 0.05 % by integrating Firebase Crashlytics, Analytics, and a force-update system for proactive monitoring and controlled rollouts.▪ Security & Compliance:<ul style="list-style-type: none">○ Achieved OWASP MASVS Level 3 compliance, ensuring enterprise-grade mobile app security.○ Integrated biometric authentication for sensitive actions such as payments and telemedicine features.▪ Model Deployment: Deployed a legacy MXNet model for ECG Classification on Android via TVM, a custom C++ runtime, leveraging compiler internals knowledge to resolve ABI compatibility and linker issues between JNI and NDK libraries.▪ SDK Interoperability: Integrated the Webex SDK into the app, bridging legacy Android Views with Compose-based logic.▪ Testing & Code Quality: Implemented unit tests (JUnit 5, Robolectric) and end-to-end tests, improving coverage and reducing regressions across mission-critical features. | |
| Tech Stack: Kotlin Coroutines Flow Jetpack Compose Hilt Retrofit WorkManager Junit 5 OKHttp WebSocket | |
| Frontier.cool <i>AI Engineer Intern</i> | <i>Taipei, Taiwan</i> 07/2023 – 06/2024 |
| <ul style="list-style-type: none">▪ Model Development: Developed and deployed a textile classification, improving accuracy from 50% to 85% using PyTorch and AWS Lambda.▪ API Development: Deployed a production-level machine learning model API on AWS Lambda for textile classification. | |
| Tech Stack: PyTorch Docker AWS Lambda AWS S3 Postman Git Python OpenCV | |
| National Tsing Hua University <i>Private Tutor</i> | <i>Taipei, Taiwan</i> 09/2023 – 06/2024 |
| <ul style="list-style-type: none">▪ Tutoring: Aided 5 students in Python, C, Computer Architecture (RISC-V), and SQL. | |

EDUCATION

| | |
|---------------------------------------------------------------------------------------|---------------------------------------|
| National Tsing Hua University, BS, Electrical Engineering and Computer Science | <i>Hsinchu, Taiwan</i> 2024 |
| ▪ GPA 3.91/4.3 (Top 6/34) Academic Excellence Award 2023 Scholarship 2020 - 2024 | |

PROJECTS

| | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| TaipeiTrash (Play Store) 📄 Tech Stack: Kotlin Jetpack Compose Google Maps SDK Room A city utility app that helps residents locate nearby garbage trucks and public trash bins. | 2025 |
| Compiler Design Tech Stack: Lex Yacc C Makefile Linux Developed a C Compiler, implementing lexical analysis, parsing, semantic analysis, code generation, and optimization. | 2024 |
| Lifeline 📄 (Android Developer, UX/UI Designer) Tech Stack: Kotlin Jetpack Compose SQL Hilt Figma An Android to-do application designed to enhance users' planning by prioritizing tasks based on duration and deadlines. | 2022 |

AWARDS

| | |
|----------------------------------------------------------------------------------------------------------------|-------------|
| Thailand Olympiad in Informatics: Competitive Programming (C++), Bronze Medal | 2019 |
| NECTEC: Thailand National Software Contest An app to simplify work attendance using geofencing in Java. | 2017 |

SKILLS & INTERESTS

Languages: Thai (Native), English (Fluent) (TOEIC – 910/990, TOEFL iBT – 96/120), Chinese (Intermediate)

Technical Skills:
Programming: Kotlin, C++, Python, Go, SQL, Java
Frameworks: Jetpack Compose, Hilt, Retrofit, Supabase, Firebase
Tools: Git, Docker, AWS Lambda, Linux