

# Han-Lin (Leo) Chen

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Product-focused software engineer with 4 years of experience building large-scale systems, cloud-integrated platforms, and automation frameworks. Currently pursuing an M.S. in Mobile and IoT Engineering at Carnegie Mellon University

## EDUCATION

<b>Carnegie Mellon University</b> , Pittsburgh, PA — <b>Master of Science in Mobile and IoT Engineering</b>	<i>Aug. 2025 - Dec. 2026</i>
<b>National Taiwan University</b> , Taipei, Taiwan — <b>Master of Science in Mechanical Engineering</b>	<i>Sept. 2019 - Oct. 2021</i>
<b>National Central University</b> , Taoyuan, Taiwan — <b>Bachelor of Science in Mechanical Engineering</b>	<i>Sept. 2015 - Jun. 2019</i>

## EXPERIENCE

**Software Engineer, Synology Inc.**, New Taipei, Taiwan *Jan. 2024 - Aug. 2025*

- Engineered mobile solutions for BeeStation, including BeeFiles, BeePhotos, and BeeCam, extending private cloud ecosystem
- Implemented end-to-end test automation for mobile-NAS platform, cutting manual QA by 60%
- Integrated LLM into CI/CD pipelines to auto-generate test code, improving coverage from none to 20%
- Facilitated workshops for 15+ engineers, standardizing test automation best practices across departments
- Developed server region-switching logic to meet regional cybersecurity requirements, serving 5K+ active users
- Migrated over 20,000 lines of legacy Objective-C to Swift, modernizing the architecture for maintainability and scalability

**Software Engineer, Delivery Hero SE (foodpanda)**, Remote, Berlin *Jun. 2023 - Dec. 2023*

- Developed and maintained Orders and Developer Experience modules, optimizing usability and developer productivity
- Designed a modular test automation framework with stubbed network layers, boosting test reliability from 70% to 100% and achieving 100% code coverage on core modules
- Led navigation architecture overhaul via RFCs, aligning 5 cross-functional teams for seamless rollout across core flows
- Integrated GraphQL codegen into API integration workflow, auto-generating schema-based code to ensure consistency and reduce backend-frontend overhead
- Drove design of download functionality in Core Network module, ensuring smooth integration across 80+ feature teams
- Proposed and delivered a real-time mobile order-tracking widget — won 1st place in an internal hackathon

**Software Engineer, CoolBitX Ltd**, Taipei, Taiwan *Nov. 2021 - Apr. 2023*

- Built and optimized core features of a Bluetooth cold crypto wallet mobile app via TypeScript and ReactNative
- Redesigning staking architecture, expanding support from 3 to 13 cryptocurrencies and 1 to 5 vendors
- Engineered base classes to streamline cryptocurrency integrations, reducing new token development time by 70% and laying foundation for scalable codebase growth
- Boosted crash-free rate from 90% to 99.7% by rebuilding iOS database access layer for thread safety
- Led Next.js-based crypto launchpad project, enabling seamless token launches for emerging blockchain projects
- Mentored a college intern during Summer 2022, guiding project onboarding and professional development

## PROJECTS

**AweOS**, x86 Assembly / C / Make / QEMU / GNU / Git *Jul. 2025*

- Built a microkernel in C and Assembly, supporting interrupt handling, memory management, and process scheduling
- Validated functionality using QEMU for virtualization and debugging, ensuring reliable kernel performance

**Mocky**, Swift / XCTest / Apple Network framework / Git *Jun. 2025*

- Designed a mobile test framework to intercept and override network responses in UI tests
- Enabled zero-code API response mocking via method swizzling, improving test coverage and enabling multi-scenario testing
- Provided minimal setup and flexible architecture compatible with any URLSession-based networking stack

**Picker**, Swift / SwiftUI / Google Map / Yelp API / GraphQL / Core Data / Git *Dec. 2022*

- Created a mobile app, helping users choose restaurants through map-based search and randomized recommendations
- Integrated Yelp API and Google Maps for personalized, location-aware recommendations

## SKILLS

**Languages:** C/C++, Swift, Python, JavaScript, TypeScript, Objective-C, SQL (PostgreSQL/SQLite), HTML/CSS, Java

**Frameworks & Tools:** React, React Native, Redux, Next.js, Node.js, Django, SwiftUI, Jest, GraphQL, Docker, Kubernetes, AWS, Firebase, GitHub Actions, GitLab CI, fastlane

**Systems:** Unix/Linux, Kernel Development, x86 Assembly, QEMU, GNU toolchains, Arduino, Raspberry Pi, FreeRTOS