

THUYEN TRINH (CHRIS)

Senior Software Engineer (iOS)

Highly skilled and motivated with proven track records of CI/CD initiatives, unit/UI/end-to-end testing solution and project build time optimization.

Seeking to leverage expertise to contribute to the success of a dynamic organization.



Contact

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<https://trinhngocthuyen.com>



Work Experience

OKX, Singapore

Staff Engineer (iOS)

Jun 2024 - Nov 2024

Mobile Infrastructure: *CI/CD, developer tools and developer experience solutions.*

- End-to-end testing solution
 - Enhanced test stability by identifying and resolving infrastructure-related errors, achieving a near-error-free testing environment.
Developed and maintained features for end-to-end servers to improve stability and performance; enhance troubleshooting experiences (ex. inspecting Appium logs, WebDriverAgent logs, pytest logs, screenshots, etc).
 - Ensured the availability of the in-house device farm by implementing service watchers and service recovery logic (for the farm).
Monitored real devices in the device farm and resolved device related issues in time.
 - Reduced overall test execution time by orchestrating parallelized test pipelines, dynamically allocating resources based on device farm

availability and task priorities.

- Designed and implemented strategies to address test flakiness, including auto-detecting flaky tests, skipping them in critical runs, and benchmarking them for further analysis.
- CI/CD process improvement
 - Improved pipeline efficiency by migrating single-step Jenkins jobs to multi-stage pipelines, enabling parallel execution and stage retries.

Grab, Singapore

Senior Software Engineer (iOS)

Feb 2018 - Jun 2022

Grab Driver: *The ride-hailing app for Southeast Asian drivers.*

- Spearheaded the successful implementation of the end-to-end testing solution within the tech family:
 - Reduced engineering effort significantly by leveraging Appium and Python to write tests once for both iOS and Android platforms.
 - Assisted QA engineers in seamlessly adopting the end-to-end testing infrastructure.
- Ensured robustness of the UI testing infrastructure:
 - Enhanced overall test reliability by introducing a sophisticated test quarantine logic to isolate flaky tests (read more: [here](#)).
 - Optimized test execution time on CI by implementing horizontal scaling, resulting in a remarkable 3x reduction in test execution time.
- Played a pivotal role in project build time reduction initiatives:
 - Developed and maintained the open-source CocoaPods binary cache, leading to a remarkable 55% reduction in project build time (from 18m to under 8m on average).
- Orchestrated the ingestion of crashlytics data from Firebase to the company's data lake, providing engineers with enhanced troubleshooting insights.

- Single-handedly managed critical CI/CD initiatives, ensuring seamless delivery of software products.
- Actively assisted engineers from other tech families with platform-related blockers or queries.

Misfit - Fossil, Vietnam

Software Engineer (iOS)

Feb 2016 - Mar 2017

Portfolio apps: *Branded apps for users to perform various actions on Bluetooth devices (trackers and smart watches). The apps support nearly 20 different languages (including RTL ones).*

- Helped develop the core modules from scratch, took the major role in the features Activity, Sleep, Goal Tracking and Client-Server Data Sync.
- Helped increase the scalability by modularizing the code base into components (corresponding to 17 development pods). One project but able to build 7 different apps sharing the common core: Kate Spade New York Connected, MichaelKors Access, Emporio Armani Connected, Skagen Connected, DieselOn, Armani Exchange Connected, Chaps.
- Proposed and pioneered adopting MVVM as a solution for massive-view-controllers, making the business logic more manageable and testable. Besides, introduced and integrated ReactiveCocoa, helping the team implement asynchronous logic clearly, readably and maintainably.
- Incorporated frameworks Quick/Nimble, MockingJay, Cuckoo to facilitate testing with less effort. Pioneered writing test cases for the core.
- Assisted new comers to straightforwardly get acquainted with the project by hosting technical knowledgesharing sessions and writing wiki documents.

Ticketbox, Vietnam

Software Engineer (iOS)

Jun 2015 - Jan 2016

Ticketbox: *For users to discover events, book and manage tickets.*

- Built the app at the early stage and successfully shipped it within 2.5 months, with the team size of 3 (1 iOS, 1 Android, 1 Designer). Maintained it till v1.0.8.
- Researched and partially adopted functional programming to make the code readable and elegant.
- Technology stacks: MVVM, ReactiveCocoa, Realm.

Ticketbox Event Manager: *For organizers to manage events, make check-in procedures more convenient.*

- Enhanced performance related to data syncing with server.
- Refactored and finally applied the same technology stacks with the Ticketbox user app to unify the code base of the 2 apps.



Side Projects

Engineering blog: <https://trinhngocthuyen.com>.

Side projects: <https://trinhngocthuyen.com/projects>.



Education

University of Science, Ho Chi Minh City, Vietnam

Sep 2010 – Sep 2014

- Bachelor of Science in Computer Science (Honours), Sep 2014. GPA: **8.31/10**.



Skills and Technologies

- Swift (proficient), Python, Ruby, Bash.
- Unit/UI/End-to-end testing.
- Xcode, CocoaPods, Fastlane, CI/CD (Gitlab CI/CD, Github Actions...), Git, RESTful APIs, Agile.
- Languages: English, Vietnamese (native).