

Sabal Katuwal

+9779865013271 | sabal.katuwal1@gmail.com | Nepal (Kathmandu, Bagmati, 44600)
<https://sabalkatuwal.github.io/PortWeb/>

PROFESSIONAL SUMMARY

I am an experienced iOS developer skilled in Swift, SwiftUI, SwiftData, UIKit, Core Animation, and the latest Apple technologies. I have been developing iOS apps for more than 2 years and have published three apps in the App Store. I am familiar with CI/CD practices for iOS app development and have knowledge of unit testing. I believe challenges are opportunities for learning.

EXPERIENCE

Software Engineer - iOS (contract), Nepal Rastra Bank ***Apr 2024 - Present***

- Developed high-performance, secure mobile applications for the retail Central Bank Digital Currency (CBDC)
- Worked on requirement gathering, system design, and research for a cyber-resilient CBDC system.
- Created a mobile wallet for digital currency transactions, facilitating the adoption of digital currency and improving transaction efficiency.
- Ensured compliance with industry security standards, resulting in trusted digital platform.

iOS Developer, Hamro Academy ***Oct 2023 - Present***

- Contributed to the development of 4 iOS applications, successfully creating and launching 3 from the ground up on the App Store.
- Developed iOS apps for college management, streamlining administrative processes and enhancing communication between students and faculty.
- Reduced bug reports significantly through rigorous testing and debugging, leading to a more reliable and user-friendly app experience.
- Collaborated to integrate advanced features, resulting in a more robust application.

Research Intern, Kathmandu University ***Jul 2023 - Sep 2023***

- Worked on the Smart Health and Startup & Incubation program.
- Developed early-phase solutions for my own startup - Saha Yatri.

EDUCATION

Computer Engineering (CGPA: 3.66) ***May/2024*** Kathmandu University

PROJECT

College App

- Build in SwiftUI using MVVM architecture to ensure scalable and maintainable codebase.
- Implemented secure authentication using Keychain, biometrics authentication and UserDefaults and utilized SwiftData for storage solution.
- Managed concurrency for smooth performance while implementing interactive features

like an MCQ quiz, discussion and query section, notes section, notification service, and PDF service.

Saral Discount App

- Integrated cloud messaging APIs and push notifications to provide real-time updates and alerts to users.
- Implemented socket programming for receiving real-time information from the server, ensuring a seamless user experience.
- Implemented secure authentication using Keychain, biometrics authentication and UserDefaults.

e-Wallet App, CBDC Project

- Implemented advanced security measures using public key cryptography, digital signatures, and X.509 certificates to ensure secure transactions and data integrity in mobile application.
- Enabled end-to-end digital currency transfers to end users, included features for requesting and redeeming digital currency directly from the app, and integrated QR functionality.

eLibrary App

- Developed a comprehensive eLibrary app using Swift, SwiftUI and AlamoFire using MVVM architecture, featuring robust library management capabilities for Kathmandu University.
- The app allows users to browse, search, borrow, renew and reserve books, with accurate tracking of all records.

SKILLS

iOS Development, Cloud Computing, Cross Platform Development, Information Security, CI/CD, Networking, Communication

AWARDS/RECOGNITIONS/VOLUNTEER WORK

- | | |
|---|------|
| ● Founding President at Kathmandu University Indoor Games Club. | 2023 |
| ● Organizer in Techno Fair, A National event of technology. | 2022 |

CERTIFICATION

- AWS Cloud Workshop by Genese Academy.
- iOS Development Bootcamp by Udemy.