William Astilla

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Education

University of North Carolina at Chapel Hill

May 2024 GPA: 3.86 Computer Science (BA); Entrepreneurship minor

Experience

iOS Engineer

Walmart Global Tech

July 2024 - Present Sunnyvale, CA

• Architect and ship a dynamic payment-allocation engine that automatically routes eligible basket items to Direct Spend Cards, expanding tender options and meeting regulatory requirements

- Lead migration from the legacy Walmart Pay checkout to a next-generation flow while keeping the old flow live behind feature flags—enabling a friction-free pilot and zero downtime for 22 M monthly users
- Onboard and mentor a senior engineer and an intern through step-by-step runbooks, pair-programming sessions, and regular feedback
- Ship features from concept to release by contributing to architecture reviews, defining mobile—backend API contracts, and aligning iOS, backend, and design teams

iOS Engineer/CMO

Jan 2022–May 2024

Chapel Hill, NC

App Team Carolina

- Collaborated with developers, PMs, and designers to build an iOS app that delivers step-free campus navigation for UNC students with mobility limitations
- Architected and built an MVVM-based SwiftUI app, integrating MapKit, CoreLocation, and additional Apple accessibility APIs
- Led a five-person marketing and partnerships team, securing sponsorship and partnership Willowtree Apps

Projects

My Spot – Date-Spot Sharing App (Swift, SwiftUI, Firebase, Combine)

- Released a production iOS app on the App Store that lets users bookmark, rate, and share their favorite date locations with friends and partners
- Integrated Firebase (Auth & Firestore) for secure user accounts and real-time data sync; employed the Combine framework for reactive state management
- Implemented location-based discovery and a custom card-style swipe animation (inspired by dating apps) for quick browsing and saving of spots

AuxJelly (Swift, SwiftUI, ShazamKit)

- Developed an iOS app using ShazamKit and Spotify's API that identifies a song playing nearby and auto-generates a playlist of similar tracks
- Implemented PKCE flow for OAuth 2.0 to secure authentication with Spotify and protect users against authorization-code interception
- Built a responsive, accessible UI entirely in SwiftUI

Computer Vision Clock (Raspberry Pi, Python, OpenCV)

- BEAM Makerfest 2023 Winner: Best Overall Project
- Built a clock that uses facial recognition to identify specific users and show a later time to hurry them out the door
- Leveraged Python, OpenCV, and Tkinter on Raspberry Pi for facial recognition, time-adjustment logic, and GUI

Roadio (Swift, SwiftUI, Python)

- HackNC 2022 Winner: Best User Experience
- Built the iOS front-end for a road-trip cost-analysis tool, handling route entry, real-time fuel-price lookup, and expense summaries

Technologies and Languages

Languages: Swift, Python, JavaScript, Java, SQL, HTML, CSS, Typescript

Technologies: SwiftUI, Xcode, UIKit, Combine, XCTest, Git, GitHub, ReactJS, AngularTS, PostgreSQL, FastAPI,

Charles Proxy, Jira, Trello, VSCode, IntelliJ, three.js