HARSHA AGARWAL

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EDUCATION

Master of Science in Computer Science & Software Engineering
University of Washington Bothell — Exp. Jun.2026

Bachelor of Technology in Computer Science & Engineering (GPA – 3.88/4.0)
Vellore Institute of Technology — Jun. 2021

Relevant Coursework **:** Data Structures and Algorithms, Object Oriented Programming, Database Management Systems, Network and Communication Systems, Operating Systems, Digital Logic and Design.

TECHNICAL SKILLS

Programming : Swift, C++, Java, SQL, MongoDB, Redis, Apache Kafka, HTML, CSS, Swift, SwiftUI, Python.

Frameworks and Tools : Xcode, Visual Studio Code, Charles, SourceTree, Jira, Bitbucket, Git, Confluence, Facebook for Business Analytics, Branch.io Analytics, Firebase, AppsFlyer, MoEngage, Spring boot, UIKit, ARKit, XCTestCase, XCUITestCase, CocoaPods, Amazon Web Services.

SOFTWARE DEVELOPMENT AND ENGINEERING EXPERIENCE

Associate Software Engineer
Quinbay Technologies — Jun. 2021 – Sep. 2024

- Innovated and executed key user features for the Blibli.com utilizing Swift, SwiftUI, Objective-C, and in-house APIs operating Spring Boot, significantly increasing Blibli.com's iOS application click-through rate by 38%.
- Constructed user interfaces for application pages leveraging MVVM architecture, SOLID principles, and Cocoa Design Patterns and collaborating with cross-functional teams resulting in a 16% elevation in user growth.
- Simplified QA process turn-around time by over 47% and restructured QA testing quality with the Instruments tool, incorporating accessibility elements throughout Blibli's application, ensuring comprehensive coverage.
- Optimized application performance by reducing page load time by 700ms by identifying and resolving zombie processes, memory leaks, and time profiling, resulting in smoother user experience and faster load times.
- Coordinated with cross-functional teams to conduct beta-testing of online user interface, analyzed user feedback and reported software bugs, optimizing functioning of Blibli.com's iOS application by 61%.
- Mentored students from various universities, guiding to transition into software development roles in an industrial setting, equipping with practical skills, industry knowledge, real-world problem-solving abilities.

Software Development Intern
Quinbay Technologies — Jan. 2021 – May. 2021

- Engineered an employee attendance application for the iOS platform with Swift, enabling efficient employee check-in and ensuring a seamless, productive, and flexible work-from-home environment during COVID-19.
- Overhauled code using CoreData, API, and Cocoa Design Patterns, devising a versatile Swift utility package for Blibli, cutting development time by 12% and greatly improving overall code quality and maintainability.
- Implemented multiple REST APIs for authentication, database CRUD operations, user product search queries, and product detail downloads, significantly enhancing data integration, system reliability, and user interactions.
- Boosted application efficiency by accomplishing revised logic structures and MVC architecture, resolving bugs and crashes, and decreasing technical debt by 30%, leading to amplifying performance and stability.

Software Development Intern
Shade6 — Apr. 2020 – May. 2020

- Developed Police Commissioner's data management system to track attendance, record-keeping, and media data CRUD operations, utilizing HTML, CSS, and JavaScript, implemented OAuth 2.0 and OpenID Connect .
- Collaborated with a multidisciplinary team to combine real-time data from Chennai District into predictive models for crime and disaster prevention, fostering a safer environment in schools and judicial systems.
- Trained law enforcement personnel on operating the data management system, boosting digital skills and system efficiency and building custom dashboards for enhanced analytics and and actionable data insights.

PROJECTS

Music Player based on Sentiment Analysis

- Created a music recommendation system using sentiment analysis, Python, TensorFlow, and NLP to suggest songs based on emotions and managed data exchange through RESTful APIs with NumPy, Python, Flask.
- Integrated REST APIs for user authentication, posting/fetching questions and answers, and real-time updates with Alamofire and AFNetworking using Spring Boot, revamping data synchronization and user experience.
- Designed and developed intuitive UI/UX for seamless navigation and content discovery with UIKit and Auto Layout and synthesized Firebase Analytics for user insights and behavior tracking to raise user engagement.