Md Arafat Hossain

Staff Engineer | iOS, macOS

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# Career Summary

Experienced Software Engineer with over 12 years of expertise in building and optimizing applications across iOS, macOS, Windows, and cross-platform environments. Proven ability to lead cross-functional teams, deliver high-performance apps, and mentor engineers. Specialized in Swift, iOS frameworks, and scalable architecture patterns. Known for driving innovations with measurable business impact and aligning solutions with strategic goals.

# Technical Skills

* **Languages & Frameworks:** Swift, Objective-C, Java, C/C++, C#, WPF, MFC
* **Mobile & Desktop Development**: UIKit, SwiftUI, Combine, ReactiveSwift, WPF
* **Architectures:** MVVM, MVVM-C, Redux
* **Tools & DevOps: Git**, Perforce, REST API, Unit Testing (XCTest, JUnit), CI/CD (GitHub Actions, Jenkins)
* **Methodologies:** Agile, Scrum

# Work Experience

Samsung R&D Institute Bangladesh Ltd. | Staff Engineer-I Mar 2021 - Present

* Led development of **Settings** and **MapView** features in **SmartThings** (20M+ downloads, 4.5+ rating)
* Implemented **Do Not Disturb** and **Emergency Alert** settings, enhancing user control and safety features
* Enhanced **MapView** by integrating **TV/light device cards** and new device support
* Migrated codebase from **ReactiveSwift to Combine**, aligning with modern Apple ecosystem standards
* Delivered **Dark Mode** support and addressed key **market VoCs**
* Modernized the UI of the **5D Viewer (WPF)** used in medical ultrasound systems
* Improved **IPC functionality using COM** in 5D Viewer, ensuring stable device communication
* Served as **Tech Lead** for **DeX for PC** (7M+ downloads, 757K+ monthly users), guiding feature planning and delivery
* Conducted **memory optimizations and code reviews** for MFC-based legacy DeX Windows applications
* Achieved **Professional Level (Top 20%)** in Samsung’s SW Certificate Test

Samsung R&D Institute Bangladesh Ltd. | Engineer-III Mar 2019 – Feb 2021

* Served as **Lead Developer & Release Maintainer** of the **DeX for PC (macOS)** application
* **Spearheaded universal macOS app support for Apple M1 architecture**
* Enabled seamless **USB and wireless connectivity** between Android devices and macOS
* Delivered robust **file transfer**, **RTSP-based screen rendering**, and **input sharing** (clipboard, keyboard, mouse) features
* Collaborated with cross-functional teams to ensure stability, performance, and user experience
* **Awards & Recognition:**
* **Samsung Mobile R&D CTO Award, 2019** – For significant business impact
* **SRBD Best Team Award, 2019**

Samsung R&D Institute Bangladesh Ltd. | Engineer-II Mar 2017 – Feb 2019

* Built **UI Automator** for Android & Tizen used internally for B2B testing
* Developed an **iOS testing framework** similar to Appium
* Created Eclipse plugin for generating test cases and integrating tools

Samsung R&D Institute Bangladesh Ltd. | Engineer-I Jun 2013 – Feb 2017

* Contributed to the development of the **IoTivity SDK**, adopted by Samsung, LG, and Microsoft IoT products
* Developed **OCF-compliant APIs** for open-source IoT interoperability
* Built a **C# .NET desktop application** for remote control of Android and Tizen devices
* Achieved **Advanced Level** (Top 50%) in **Samsung’s Software Certification Test**

RTC Hubs Limited | Junior Programmer Sep 2012 – Jun 2013

* Created **Multi Shot Cam, a top-charted app** that generated the highest revenue at **RTC Hubs**
* Developed **8+ iOS applications**, including camera and productivity tools
* Implemented **real-time camera effects** using [**GPUImage**](https://github.com/BradLarson/GPUImage) in multiple apps

# Mentoring and Leadership

* **Tech Lead**, **DeX for PC** project (2021–2023) — led feature planning, delivery, and cross-platform coordination for a product and mentored **12+ team members**, ensuring high-quality deliverables
* **Part Lead & Lead Developer**, **DeX for PC (macOS)** — oversaw architecture, implementation, and release processes
* **Part Lead**, **SmartThings (Settings & MapView)** — led roadmap planning, handled market VoCs, and resolved QA issues
* **Tech Lead**, **5D Viewer** — facilitated communication with HQ, managed documentation, and conducted knowledge transfer
* Delivered a **proof-of-concept of DeX for macOS** to Samsung CTO, driving executive buy-in and strategic direction
* Collaborated closely with **Product Managers & VPs** to define **functional & non-functional requirements** for **DeX** project
* Onboarded **5 new hires**, and participated in recruitment and interview evaluations

# Education and Certification

**B.Sc.** in **Computer Science and Engineering**

Rajshahi University of Engineering & Technology Feb 2008 – Sep 2012