# Md Ariful Amin

Malmö, Sweden +46 722 705 966 arifulamindu@gmail.com

With more than five years of experience in the software industry, I specialize in developing health-tech wearable applications, especially for smartwatches, using C/C++. I am also skilled at building scalable systems from scratch, optimizing the performance of the overall solution, and delivering impactful projects on time, like **HeartWise** at my previous company. To move into more effective data-driven health technological solutions and exciting software solutions, I am pursuing a master's in applied data science at Malmö University, strongly emphasizing machine learning.

#### **EXPERIENCE**

# **Coal Power Generation Company Bangladesh Limited**

April 2022 - August 2024

— IT Engineer

- Spearheaded idea generation and conducted in-depth requirement analysis for cutting-edge software solutions, resulting in a 15% boost in organizational KPI achievement while managing and continuously optimizing the official website for peak performance.
- Led a front-end development of IT and stationery management software using React, enhancing user efficiency by 30% with optimized UI/UX design and improved system performance.

# Samsung R&D Institute Bangladesh, Dhaka

January 2022 - April 2022

— Lead Engineer

- Worked with Samsung Research America (SRA) to develop the HeartWise smart-watch application, a home-based heart wellness program endorsed by top cardiologists in the USA, significantly enhancing remote patient monitoring and speeding up product delivery timelines.
- Implemented key features such as multilingual support, Six-Minute Walk Test (6MWT), exercise data synchronization, and secure wireless connectivity between smartwatch and mobile using BLE. This BLE communication enhancement eliminated the need for LTE connectivity, reducing per-patient deployment costs by 16%.
- Conducted open-source and security verifications for each market release version using in-house software, reducing security risks by

# Samsung R&D Institute Bangladesh, Dhaka

April 2018 - December 2021

— Software Engineer

- Created an interactive and reusable UI design for the entire HeartWise Tizen smartwatch application, ensuring a smooth user interface that enhances the experience, especially for elderly users.
- Engineered a robust data retrieval and visualization system for smartwatch sensors through seamless API integration.
- Implemented a self-upgrade mechanism for the Heartwise application to enhance the software update process, ensuring lightning-fast and automated updates for all end-users.
- Resolved more than 300 critical issues to optimize and stabilize the Tizen HeartWise application, driving significant improvements in performance, reliability, and overall user satisfaction

#### **EDUCATION**

MSc. in Applied Data Science Malmö University, Sweden SISGP Scholar Aug 2024 - Present

BSc in Computer Science and Engineering University of Dhaka, Bangladesh

Jan 2014 - Jan 2018

#### **SKILLS**

# PROGRAMMING LANGUAGES

C, C++, Python, JavaScript, HTML, CSS, Tailwind CSS, React, NeXTs

#### APP DEVELOPMENT

Tizen, Android

DATABASE

MYSQL, Firebase. SQLite, MongoDB

#### CODE REPOSITORY

GitHub, Gerrit

# PROJECT MANAGEMENT

Jira, PLM, TRESSA

### **AWARDS**

- 1. Awarded SI Scholarship for Global Professionals 2024 by the Swedish Institute to support my master's studies.
- 2. Received the "Icon of the Month (May -June 2019)" honorary award from Samsung R&D Institute, recognizing outstanding contributions among a competitive pool of 300 employees.

# **PUBLICATION**

3. One Conference Paper, titled "Network lifetime aware anchor selection for energy harvesting wireless sensor networks," was presented at the 2017 IEEE Region 10 Humanitarian Technology Conference (R10-HTC).

Website: <a href="https://ariful-amin.vercel.app/">https://ariful-amin.vercel.app/</a> GitHub: https://github.com/ariful59

https://www.linkedin.com/in/ariful-amin/