

MD ARIFUL AMIN

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I have more than five (5) years of experience in the R&D industry where I worked on health-tech applications. I am proficient in building smartwatch applications from scratch, designing, and integrating APIs, implementing and using smartwatch's internal APIs, building reusable components, and following scalable design models. Currently, I am privileged to work with a cybersecurity team at a government-owned electricity company, focusing on safeguarding credential information to prevent any potential breaches.

EXPERIENCE

Coal Power Generation Company Bangladesh Limited, Bangladesh

– Assistant Programmer

APRIL 2022 – PRESENT

- Managed a team of five cybersecurity professionals to instruct a total of 87 employees and conducted monthly IT audits on the network to detect and address any vulnerabilities which reduced the 20% chances of cyber-attacks.
- Web application development, network maintenance, organization's website development and new feature integration, power plant inventory management, and hardware and software-related support in the organization.

Samsung R&D Institute Bangladesh, Dhaka

– Lead Engineer

JAN 2022 - APRIL 2022

- Worked as a lead Tizen application developer of [Samsung Heartwise](#) application built with C++, a cardiac rehabilitation research program collaborated with Samsung Research America (SRA) & Kaiser Permanent, USA.
- Provided language support in multiple languages, and implemented the Six Minutes' Walk Test (6MWT) which is used by 20,000 patients.
- Ensured a secure wireless connection, and facilitated data transfer between a smartwatch and mobile device using Bluetooth Low Energy which eliminated the need for an LTE connection, and reduced the cost of deployment of this program per patient by 16%.
- Performed open-source validation and security checks on multiple versions using in-house software before their market release.

Samsung R&D Institute Bangladesh, Dhaka

– Software Engineer

APRIL 2018 - DEC 2021

- Implemented reusable 30% UIs of the [Heartwise](#) Tizen smartwatch application which are user-friendly for senior citizens.
- Applied encryption-based technique to secure [Heartwise](#) application's database and processed data and batch data from various smartwatch sensor APIs depending on their needs.
- Implemented the self-upgrade mechanism in a smartwatch to enable automatic updates [Heartwise](#) application thereby minimizing the inconvenience for patients especially older patients to manually upgrade their application version.
- Resolved over 200 issues to enhance the performance and stability of the Tizen [Heartwise](#) application, addressing critical concerns such as battery draining.

ACADEMIC CREDENTIALS

Bachelor of Science in Computer Science and Engineering

JAN 2014 - JAN 2018

University Of Dhaka, Bangladesh

CGPA 3.24 / 4.00

RESEARCH EXPERIENCE

Undergraduate Research

Green Networking Research (GNR), University of Dhaka, Bangladesh

Feb 2017 - Dec 2017

- *Network lifetime awareness anchor selection*: Network lifetime has always been a key issue for wireless sensor networks. For this reason, we introduce an energy harvesting and depletion-aware anchor selection algorithm which makes the network perpetuity.

Undergrad Thesis Title: “Network lifetime aware anchor selection for energy harvesting wireless sensor networks”

PUBLICATION

[One Conference Paper In 2017 IEEE Region 10 Humanitarian Technology Conference \(R10-HTC\).](#)

TECHNICAL SKILLS

- **Programming Languages**: C, C++, HTML, CSS, JavaScript, Python, Java.
- **Technologies**: React, Nextjs, NodeJS, Tailwind CSS, Bootstrap.
- **App Development**: Tizen, Android
- **Database**: MYSQL, SQLite
- **Code Repository**: GitHub, Gerrit
- **Project Management**: Jira, PLM, TRESSA

EXTRA-CURRICULAR ACTIVITIES, AWARDS AND ACHIEVEMENTS

- Honorary Award from Samsung R&D Institute, Bangladesh (SRBD) Icon of the Month (May ~ June 2019).
- 5th IEEE Region 10 Humanitarian Technology Conference. (Dec 21~23, 2017).
- Power and Energy Hackathon, Ministry of Power Energy and Mineral Resources, Bangladesh (April 19~20, 2017).
- Member of CSEDU Intra Dept. Soccer team (Champion of 2015, 2017).
- Scholarship in National Junior Scholarship Examination, 2008.
- Talent Pool Scholarship in National Primary Scholarship Examination, 2005.

LINGUISTIC PROFICIENCY

- English (Fluent Working Proficiency)
- Bangla (Native Language)

LINKS

GitHub: <https://github.com/ariful59/>

Linkedin: <https://www.linkedin.com/in/ariful-amin>

REFERENCES

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