UTTAM KUMAR MONDOL

LEAD SOFTWARE ENGINEER

44/27 Dhaka-1205, Bangladesh | uttamcse11cuet@gmail.com | +8801740250558 linkedin.com/in/uttam-kumar-583172132

Objective

Forward looking Engineer with 6+ years of Experience on C&C++, Java, Android, Python in creating highly optimized and fast application on RTOS(zephyr), Tizen and Android, Low power and memory devices, willing to work in device level development.

Skills & abilities

C&C++, Java, Python, Zephyr-RTOS, Embedded System, Tizen, Android, CMake (west, ninja), Git, Gerrit, Perforce

Experience

SAMSUNG R&D INSTITUE BANGLADESH

Lead Engineer | March 2023 - Present

- Design application architecture
- Design database for memory constraint devices
- Design and implement data communication protocol between devices and implementation
- Skills: C & C++, Zephyr, RTOS, Android

Software Engineer | February 2018 - March 2023

- Analyze requirement and design development plan and implement
- Debug and Test code and optimization
- Issues fix and release app inhouse and Galaxy app store.
- Skills: C & C++, Tizen, EFL, Curl library

Projects

RTOS based Application Develop | July 2022 - Present Zephyr | C & C++, CMake(west) | Python3

Highly optimized application development in low-power and memory constraint device in Zephyr SDK and C language. Design application architecture, Data synchronization protocol between local and terminal devices, works on Memory management (Nonvolatile flash memory), File system (little fs, NVS), System api and develop features. Works on OOBE, FOTA(firmware over the air, device binary or software update), Battery api (charging, battery level), Sensor, BT-BLE modules (advertise, data communication). Debug code with GDB tools, Jlink debugger.

Wearable Weather Application | February 2018 – July 2022 Tizen | C & C++ | EFL | Curl library

Supported device Galaxy Watch3, Galaxy active 2, Galaxy Active, Galaxy Sports, Fit2, Fit2 pro

This application fetches the weather data from weather server and display for several areas according to user preference. Curl library is used for rest api to fetch weather data from network. Location module is used for precise location based weather data. It also serves as service app to provide weather data to other applications. It supports backup and restore features. The application has both window and widget user interface which developed with EFL, Cairo UI library. The main challenging tasks is batter consumption, optimization in respect of UI rendering, rest api implementation. Project link https://galaxystore.samsung.com/geardetail/com.samsung.weather

Education

CHITTAGONG UNIVERSITY OF ENGINEERING AND TECHNOLOGY

Chittagong | BSc in Computer Science and Engineering | 2017

Earned 3.32 CGPA.

Major Courses are Object Oriented Programming, Data Structure, Electronics Devices and Circuits, Database Management Systems, Microprocessors and Assembly Language, Theory of Computing, Numerical Analysis, System Analysis and Design, Artificial Intelligence, Operating Systems, Data Communication, Computer Architecture, Communication Engineering, Neural Network and Fuzzy Logic, Computer Peripherals and Interfacing, Compiler Design, Computer Networks, Digital System Design, Software Engineering, VLSI Design, Information Security and Control.

CANTONMENT PUBLIC SCHOOL AND COLLEGE, RANGPUR

Rangpur | Higher Secondary Certificate Examination | 2011

Earned 5.00 GPA. | Science Group

JAHURULHAT HAJI ELAHI HIGH SCHOOL

Gaibandha | Secondary School Certificate Examination | 2009

Earned 5.00 GPA. | Science Group

Communication & Leadership

Work on different module owner, understand and clarification on dependent module. Regular discussion on both technical and others inside team and outside. Attending different Team activities, Knowledge sharing sessions.

Certificate & Award

Programming Certificate

• Samsung Certified Professional Programmer

Technical

- LinkedIn | Advanced C Programming: Optimize Performance and Efficiency
- Udemy | CMake, Tests and Tooling for C/C++ Projects [2022 Edition]
- LinkedIn | Secure Coding in C
- Udemy | Unix For Beginners
- Udemy | Python 3: Deep Dive (Part 1 Functional)
- LinkedIn | Advanced Python
- LinkedIn | C++ Design Patterns: Creational
- Udemy | Learn GIT In depth with BitBucket- Practical work flows

Leadership

- LinkedIn | Communicating to Drive People to Take Action
- LinkedIn | Powerless to Powerful: Taking Control

Language

Bangla (Native) | English

References

Samir Halder

Project Lead | RTOS Application Development| Samsung R&D Institute Bangladesh s.halder@samsung.com | +8801722018088

Raquibul Hasan

Head of The Part | Wearable eXperience | Samsung R&D Institute Bangladesh Raquibul.h@samsung.com | +8801787676588