

Md Showkat Hossain Chy

📍: 1825 S 3rd St, Waco, TX - 76706, United States.
☎: +1 254-340-7472 | ✉: mdshowkathossainchy@gmail.com | in: sonnet-n | 📺: showkat2203 | 🌐: chy.io

EDUCATION

Baylor University <i>Masters in Computer Science</i>	Jan 2022 – Dec 2023 Waco, TX
Daffodil International University <i>Bachelor of Science in Computer Science and Engineering</i>	Jan 2013 – May 2018 Dhaka

WORK EXPERIENCE

Fullstack Developer <i>International Collegiate Programming Contest (ICPC) Lab, Baylor University</i> <ul style="list-style-type: none">Developed new features, fixed bugs, and made code improvements for the ICPC official in Java-Spring-Boot and ReactJS.Merged ICPC official and ICPC Hotel ReactJS projects to communicate with different microservices.	Jan 2022 – Jun 2022 Waco, TX.
Senior Software Engineer <i>Samsung R&D Institute Bangladesh (SRBD)</i> <ul style="list-style-type: none">Developed Samsung Accessory Protocol(SAP) library in C/C++ for seamless and secured communication, and data exchange.Implemented message queues using Dialog’s DA1469x SDK for efficient inter-task communication.Taken part in software architecture and system design, code reviews, and tasks assignment among team members.	Mar 2020 – Dec 2021 Dhaka
Software Engineer <i>Samsung R&D Institute Bangladesh (SRBD)</i> <ul style="list-style-type: none">Built FreeRTOS-based applications & backend services using test-driven development (TDD) for wearable devices.Developed and debugged applications for wearables using JTAG and worked with MCU peripherals including SPI and UART.Designed & developed application’s GUI in embedded UI framework (e.g. emWin).	Jul 2018 – Feb 2020 Dhaka
Junior Fullstack Developer <i>Divine IT Limited</i> <ul style="list-style-type: none">Developed new features for Django-based ERP solutions encompassing payroll, HR, inventory, sales, procurement, etc.Integrated a payment system to purchase AirTicket using REST API in Python, Django, Javascript, Ajax, and JQuery.	Jan 2018 – Jun 2018 Dhaka

INTERNSHIP AND ACADEMIC EXPERIENCE

Software Engineer Summer Intern <i>Tech @ Tyson Foods</i> <ul style="list-style-type: none">Developed a VR application in Blueprint & Python to benchmark human performance in identifying burned chicken nuggets.Deployed a Perforce server locally for version control and later migrated it to AWS for improved accessibility.	May 2023 – Aug 2023 Springdale, AR.
Graduate Teaching Assistant <i>Baylor University</i> <ul style="list-style-type: none">Java & C++ programming course instructor, facilitating students to develop problem-solving skills, grading assignments for labs.	Jan 2022 – Dec 2023 Waco, TX.

TECHNICAL SKILLS

- Languages:** C, C++, Python, Javascript, Java, Blueprint, HTML, CSS, Bash.
- Frameworks & Libraries:** Django, ReactJS, Free RTOS, Java Spring Boot, Bootstrap, jQuery, NumPy, Pandas, TensorFlow.
- Databases:** MySQL, PostgreSQL, MongoDB.
- Developer Tools:** Git, Perforce, Docker, Postman, Grafana, AWS, EC2, S3, CloudWatch, GCP, Kafka, Jira, JTAG.
- Problem Solving:** Solved 1300+ programming problems in [UVA](#), [HackerRank](#), [LeetCode](#), [LightOJ](#), and [Codeforces](#) etc.
- Technical knowledge:** Distributed Systems, Software Architecture, Bluetooth Protocols, Microservices, Design Pattern.

HONORS AND AWARDS

- CTO Award (Team), Samsung Electronics, 2019.
- Champion in DIIT Code Fest, 2015.
- 35th in the National Collegiate Programming Contest (NCPG), 2015.
- 1st runner-up in Intra University Programming Contest, 2014.
- 3rd runner-up in Intra University Mathematics Olympiad, 2014.

PROJECTS

Transaction Recovery and Lock Manager Python, MongoDB, MapReduce, PySpark, MySQL <ul style="list-style-type: none">Created Python-based database transaction system ensuring ACID properties for reliable and consistent data operations.Implemented strict two-phase locking and write-ahead logging for data integrity and fault tolerance in critical database.Written programs to analyze baseball data, implementing Weighted On-base Average for Hall of Fame eligibility assessment.	Sep 2022 – Feb 2023
Dual Sensor PoC C, C++, FreeRTOS, Bluetooth Low Energy <ul style="list-style-type: none">Demonstrated real-time transmission of wearable IoT sensor data to smartphones every 15 milliseconds.Enabled seamless and efficient data transfer using Bluetooth Low Energy (BLE) protocol for Nintendo gaming console.	Jan 2021 – Dec 2021
Galaxy Fit and Galaxy Fit2 C, C++, FreeRTOS, BLE, Dialog SDK <ul style="list-style-type: none">Established secure connections between wearables and smartphones, facilitating encrypted data transfer with BLE & SAP.Resolved BLE compatibility issues for seamless connectivity with Android/iOS smartphones.Designed and implemented a customized message packet format for successful integration with Bluetooth.Implemented features related to fitness tracking, sleep monitoring, stress analysis, and heart rate measurement.Collaborated with Samsung HQ in South Korea for streamlined issue resolution and timely product release.	Nov 2018 – Dec 2020