

KM Ferdous

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EXPERIENCE

Lead Software Engineer

Apr 2023 – Present

EcoSoftBD IT Ltd

Dhaka, Bangladesh

- Outlined the project scope, facilitated backlog refinement, and guided the development team following Scrum practices
- Developed the backend architecture adhering to the **Onion architecture** principles to ensure a modular and maintainable system, with clear separation of concerns. Also, incorporated **unit tests**, **integration tests**, and other relevant practices
- Boosted the speed and efficiency of real-time share trading by **5 times** by enhancing the data model and restructuring the microservice architecture.
- Enhanced data transfer efficiency by **a factor of 10** by implementing **algorithmic compression** and effectively managing back pressure during real-time data transmission
- Played role as Quant Developer for **Quantitative Finance** of Dhaka Stock Exchange Trading.
- Worked with Financial Information eXchange (FIX), ITCH and FAST protocol to communicate with Stock Exchange
- Utilized technologies including C#, ASP.NET Core, MongoDB, Redis, React, SignalR, REST API, AWS, Cypress, and NUnit.

IT Consultant

Jan 2019 – Mar 2023

Ministry of Finance

Dhaka, Bangladesh

- Engaged with stakeholders to collect requirements, performed in-depth requirement analysis, and then proceeded with data modeling and module development.
- Automated salary calculations, festival bonus calculations, and facilitated real-time Electronic Fund Transfer along with employees service history management.
- Achieved the milestone of enabling **over 1 million** government employees to receive their payments via EFT.
- Developed a House Loan Subsidy management module, which automated EMI calculations and successfully facilitated subsidies for **more than 2 thousand** employees through the system.
- Employed technologies including C#, ASP.NET MVC, Oracle PLSQL, and Redis to accomplish the project.

Software Engineer

Feb 2013 – Dec 2018

Reve Systems Ltd

Dhaka, Bangladesh

- Built a desktop application designed for learning 10 communicative languages, incorporating a RESTful service.
- Executed the implementation of peer-to-peer audio call capabilities along with group call functionality, which included the feature of call recording.
- Accomplished the achievement of enhancing audio quality by integrating the memory-efficient OPUS audio codec, resulting in a **7-fold** improvement.
- Mentored a team and played the role of a Scrum Master
- Researched RFC for RTP, SIP and implemented video call feature for the software using FFMPEG
- Utilized a range of technologies including C#, C++, WPF, .NET Framework, Java, Springboot, and MySQL to achieve project goals.

TOP PROJECTS

- Online Share Trading** | *C#, ASP.NET Core, React, MongoDB, Redis, Bitbucket* Apr 2023 – Present
- A complete online share trading software solution which has BO account opening, Order management, market analysis, and various easy-to-use features
- IBAS++** | *C#, ASP.NET MVC, Oracle, Redis, PLSQL, Azure, TFS, Git* Jan 2019 – Mar 2023
- Integrated Budgeting and Accounting System (IBAS) is a web-based Financial solution for the Management of budgets and payments of the government of Bangladesh
- Vasha Guru** | *C#, Java, C++, WPF MVVM, MySQL, Springboot, Git* Jun 2016 – Jun 2018
- It is a virtual classroom software that is one of the milestone projects of the ICT Division, Bangladesh. It is a desktop-based teacher-student interactive digital learning system.
- iTelPCDialer** | *C#, C++, .NET, SQLite, TFS, SIP, RTP* Feb 2013 – Jun 2016
- It is the desktop version of iTelMobileDialer, a client-side application, one of the signature products of the company. It is a VoIP solution for international clients

EDUCATION

Bangladesh University of Engineering and Technology Dhaka, Bangladesh
Bachelor of Science in Computer Science and Engineering Jan 2008 – Feb 2013

TECHNICAL SKILLS

Languages: C/C++, C#, Java, SQL, PLSQL, JavaScript
Frameworks: .NET, ASP.NET MVC, ASP.NET Core, Springboot, WPF MVVM
Database: Oracle, MySQL, Redis, MongoDB, SQLite
Version Control: Git, TFS
DevOps: Bitbucket, Jenkins, Azure, AWS
Developer Tools: Docker, Visual Studio, IntelliJ, VS Code, Burp Suite, Postman
Testing Framework: NUnit
Quantitative Finance: QuantLib
Protocol: FIX,ITCH, FAST, SIP, RTP, UDP, TCP, HTTP, REST