## **CURRICULUM VITAE of MOHAMMAD SELIM MIAH**

Road#2, House#4, Block-C, Flat# 6B, Aftabnagar, Badda, Dhaka-1212, Bangladesh E-mail: <a href="mailto:selimcse98@hotmail.com">selimcse98@hotmail.com</a>, Cell Phone: +8801711506164

### EDUCATION:

## **Bachelor of Science in Computer Science and Engineering**

University: Bangladesh University of Engineering and Technology (BUET).

Bangladesh.

Completed on: November, 2004

CGPA: 3.14/4.00

## AREA OF SPECIALIZATION:

- > Experienced in design, planning and development of in-house software development.
- Work as a solution architect, requirement handling and proposing solution within avalable limited resources.

### COMPUTER/IT SKILL:

Programming Language	C, C++, Java, Visual Basic, Visual C/C
Database	Oracle, MySQL
Software Design	UML Diagram, Microsoft Visio
Operating System	Windows, Solaris/Unix/Linux
Web server scripting	PHP, JSP, HTML
Shell Scripting	Pearl/AWK, Python, Windows Batch Script, Bash Shell Script
Applications	Exceed/Citrix, WAMP, Apache, Macromedia Dreamweaver, Crystal Reports, MS office.

### WORK EXPERIENCE:

## APRIL, 2005 – Present: Grameenphone Ltd.

Specialist (Lead Engineer). Back Office, Service Operation Center (SOC), Grameenphone Ltd (GPHOUSE, Bashundhara, Baridhara, Dhaka-1229, Bangladesh, Telephone: +88029882990, Fax: +880-2-9882970, <a href="http://www.grameenphone.com">http://www.grameenphone.com</a>), March, 2011—Present.

- <u>Deputy Superintendent Engineer</u>, Network Operation Center (NOC), Grameenphone Ltd, August, 2006—March, 2011.
- <u>System Engineer</u>, Network Integration & configuration (NIC), Network Operation Center, Grameenphone Ltd, April 2005—August, 2006.

## **Key Job Responsibilities:**

- > Technical analysis, fault handling and enhancement of voice, data and value added services provided by different vendors.
- ➤ Requirement analysis, design solution, design and develop in-house software to gain efficiency of regular telecommunications operation and maintenance.
- ➤ Develop, troubleshoot, upgrade, bug-fixing of in-house developed tools and continuously find scope of automation wherever possible to minimize manual routine works.
- Automation of entire radio network parameter inconsistency checking, writing end user documentation and operational procedures
- ➤ Software Package Loading and version upgradation of Core nodes (MSC, BSC, MGw, TSC, HLR, STP) to adapt increasing subscriber with updated features.
- Allocate and optimize necessary end-to-end capacity for all types of trunk E1, SS7 and SIGTRAN signaling as per business forecast.
- ➤ Design test cases and conduct user acceptance tests (UAT) to ensure functionality and services of new products.

### **Projects involvement:**

**Network Coverage Area:** To precisely locate covering areas of MSC, BSC and BTS serving cells. Grameenphone has a vast network covering the entire country. It is very important to know which network equipment is responsible for which location of coverage. Previously there was no standard way of determining covering location. So, I was assigned to automate network coverage. Oracle database was used to store covering area address of each BTS cell (around 23000 cells). I developed java based (J2SE & JDBC) user interface to map BTS location with BSCs and MSCs coverage area. I also prepared design documents using UML, Design patterns, and IBM Rational Rose. Finally Thana and District-wise coverage is deployed in my in-house webpage (PHP, MySQL) for concerned stake holder's usage.

**Network Health Checkup:** To automate daily health checkup of IN, VAS, GPRS network. Earlier health checkup was performed manually which required significant amount of manning resources and was prone to human error. I automated entire health checkup process. A java class was implemented to telnet required commands to network elements and output was saved in plain text files. Later those files were parsed and compared with standard KPI values to detect errors automatically. So, everyday my tool performs duty of 4 engineers' whole day work.

Lawful Interception: Real time subscriber tracing to assist law enforcing agencies. Earlier subscriber specific real time sensitive information was gathered manually by sending commands to different network elements. Since, Grameenphone is a complex network of different vendors and platforms; it required significant time to locate/trace a subscriber. But law enforcing agencies require real time information. So, I developed software which can automatically collect information from all vendor/platforms and correlate those data to get required information. I used Java (J2SE), Python, Oracle and JDBC for this software.

**Rollout Support:** To provide radio parameters' status via Push-Pull SMS using SMPP protocol. I along with some of my colleagues worked on this project. Our field engineers around the country need to know status of various cell parameters. Previously, they called our hotline and our terminal engineers provided necessary information. Amount of called that we received per day was huge. After implementation of this project, field engineers are now able to get required information using push-pull SMS short codes.

**System Backup Automation:** Ericsson GSM telecom equipment requires preservation of sensitive data. Previously, it was done by transferring backup to physical storage media (magnetic tape/optical disk). Since network equipments are situated all over the country, it was tremendously manual work, time consuming and required significant man-hour. I implemented centralized backup server which collect all necessary files using secure FTP. A webpage was developed (PHP, MySQL) to store information of network elements with latest backup. MS Visio diagram was used to show network element topographically. All concerned stake holders can easily collect backup from the central server no matter how far they are located physically.

**SOC internal webpage:** I worked on my department's internal webpage which contain all necessary information of our day to day operation. This webpage consolidates all other in-house developed tools. It also provide necessary information regarding network elements, our network topology, diagrams, process procedures, SLA, reports, contact information of required personnel and organization.

# October 02, 2004 – April 12, 2005: Trainee Software Developer Sansons corporation, Dhaka, Bangladesh.

## **Key Job Responsibilities:**

- Concurrent versioning system implementation
- Planning and writing Test cases
- Mobile Software development in J2ME

- Web application programming with JSP/Servlets, Apache Struts/Tiles Framework
- Load testing
- Software Testing
- Software development using java (J2SE)

### **Achievements:**

- Bengali Talking Calculator: I prepared a calculator which can be deployed to mobile devices using J2ME. This calculator was targeted to the common people of Bangladesh. The beauty of this calculator is that in can pronounce the result of arithmatic operation.
- Bengali T9 Dictionary: It was also developed using J2ME. It simulated T9 dictionary for Bengali language.

### RELEVANT ACADEMIC IT PROJECTS:

**Digital Clock and Calendar:** It was my first semester project. I implemented it in C language.

**Live Cricket Score Board:** I developed a java (Swing) based cricket score board which took input from users and displayed scores, ranking, players profile etc.

**Library Managment System:** Library Books information was stored in Oracle database. I developed front end application using Visual Basic to retrieve data based on user's requirement. Books status were marked as on loan or available in inventory. User can request available books only. Fine system was introduced for defaulters of loan. Crystal reports were used for better presentation of data.

**Video Image Processing:** I and one of my class mate worked together on this project. Our task was to replace one pictur by another from video image. We implemented it in Visual C++ and used Edge detection algorithm to detect the image from each frame of that video.

### **UNDERGRADUATE THESIS PROJECT:**

*Unicode Compliant Bangla Text Sorting and Searching*, under supervision of Professor Dr. M. Kaykobad, department of Computer Science & Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh. I developed a Visual Basic software to implement sorting (quicksort) and searching (binary search) alrogithms for Unicode compliant Bengali words.

## REFERENCES:

### **Monowar Sikder**

General Manager Head of Service Operation Center (SOC) Operations, Technology, Grameenphone Ltd.

Mobile: +8801711080150

Email: monowar.sikder@grameenphone.com

## Dr. M. Kaykobad

Professor
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology (BUET)
Dhaka-1000, Bangladesh.

Email: kaykobad@cse.buet.ac.bd