



KEY QUALIFICATION:

- Master of Information Technology, specializing in *Software Engineering* with an average grade of *High Distinction* from the School of Information Technology, Deakin University, Australia.
- Graduate Diploma (GNIIT), specializing in *Systems Management* with an average grade of *Excellent* from NIIT, Dhanmondi, Dhaka, Bangladesh.

RESEARCH INTERESTS:

- Receiver Operating Characteristics (ROC) Curves,
- Data Mining and Machine Learning,
- Computational Intelligence and Fuzzy logic,
- Bioinformatics and Genomics,
- Cancer prediction and clinical decision support system.

PUBLICATIONS:

- **Improving k -Nearest Neighbour Classification with Distance Functions based on Receiver Operating Characteristics.** Md. Rafiul Hassan, M. Maruf Hossain, James Bailey and Kotagiri Ramamohanarao. In *Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML PKDD 2008), Part I, LNAI 5211*. Pages 489-504, September 15-19, 2008, Antwerp, Belgium.
CORE Ranking: **A**, Acceptance Rate: **20%**
- **Forecasting Urban Air Pollution Using HMM-Fuzzy Model.** M. Maruf Hossain, Md. Rafiul Hassan and Michael Kirley. In *Proceedings of the 12th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2008)*. Pages 572 – 581, May 20-23, 2008, Osaka, Japan.
CORE Ranking: **A**, Acceptance Rate: **25%**
- **ROC-tree: A Novel Decision Tree Induction Algorithm Based on Receiver Operating Characteristics to Classify Gene Expression Data.** M. Maruf Hossain, Md. Rafiul Hassan and James Bailey. In *Proceedings of the 2008 SIAM International Conference on Data Mining (SDM 2008)*. Pages 455 – 465, April 24-26, 2008, Atlanta, GA, USA.
CORE Ranking: **A**, Acceptance Rate: **27%**

JOB EXPERIENCE:

1) Head Tutor (Casual) for 433-341 Software Engineering: Processes and Practice

Duration: March 2008 – June 2008

Head Tutor (Casual) for 433-343 Professional Issues in Computing

Department of Computer Science and Software Engineering, The University of Melbourne, Melbourne, VIC 3010, Australia

Duration: June 2006 – November 2006

Job Description:

Teaching:

- Conducting tutorials.
- Assisting the subject coordinator in the development of tutorial exercises and written project assignments.

Consultation:

- Reading the subject news group and respond to queries.
- Assisting in maintenance of subject web pages.
- Participating in student-staff Liaison meetings.
- Handling requests for project extensions and record extensions granted.
- Consulting students on their assignments or understanding issues discussed in lectures regularly.

Assessment:

- Marking a share or project submissions, presentations, assignments and exam papers.
- Assisting with development of project submit scripts.
- Developing project marking guidelines and marking sheets in cooperation with subject coordinator and assist with exam marking.

Administration:

- Creating and supporting the project groups.
- Printing and distributing student submissions to casual staff for marking.
- Actively collecting marked projects from casual staff and collating marks.
- Computing penalties for late project submissions and collecting and collating marks for project work and tutorial performance.

Management:

- Coordinating casual staff for the subject.
- Attending regular meetings with the subject coordinator and subject staff.
- Assisting with casual staff pay claims.

2) Tutor (Casual) for 433-341 Software Engineering: Processes and Practice

Department of Computer Science and Software Engineering, The University of Melbourne, Melbourne, VIC 3010, Australia

Duration: March 2006 – June 2006

Job Description:

- Conducting tutorials.
- Consulting students on their assignments or understanding issues discussed in lectures.
- Conducting interviews and taking viva voce.
- Marking presentations, assignments and exam papers.

3) Sub-Editor (News Editor),
Monthly Computer Tomorrow, 69/F Green Road, Panthapath, Dhaka, Bangladesh

Duration: April 2002 – February 2004

Job Description: Total coverage of IT news home and abroad, conducting interviews, career based reporting, magazine quality control and maintaining deadlines. Supervision of a team of 5 – 10 technical writers and DTP professionals per month was also a part of my duties.

EDUCATIONAL QUALIFICATION:

Degree/ Diploma / Certificate	Group / Faculty	Passing Year	Department / College / School	Board / Institute / University	Division / Grade
Doctor of Philosophy	Engineering	2009	Department of Computer Science & Software Engineering	The University of Melbourne, Australia	<i>Continuing</i>
Master of Information Technology (Software Engineering)	Science & Technology	2005	School of Information Technology	Deakin University, Australia	High Distinction (>80%) Achieved Score 89.67%
Graduate Diploma in Information Technology (Systems Management)	–	2001	Dhanmondi Center	NIIT, Bangladesh	Excellent (> 80%) Achieved Score 91.79%
Bachelor of Science (Honors)	Science	2003	Department of Mathematics	University of Dhaka, Bangladesh	3rd (> 35%) Achieved Score 36%
HSC	Science	1996	Notre Dame College	Education Board of Dhaka, Bangladesh	1st (> 60%) Achieved Score 73.7%
SSC	Science	1994	Udayan Bidyalaya	Education Board of Dhaka, Bangladesh	1st * (> 75%) Achieved Score 86.9%

Units Covered at Deakin University, Australia:

Unit Code	Unit Title	%	Grade
SIT725	Advanced Software Engineering	78%	D
SCC733	Practical Software Development	90%	HD
SIT751	Java Network Programming	95%	HD
SCC764	Project Management for Software Development	80%	HD
SCC771	Object-Oriented Programming	96%	HD
SCC772	Database and Information Retrieval	92%	HD
SCC773	Systems Analysis and Design	86%	HD
SCC774	Web and Internet Programming	97%	HD
SIT775	Information Technology in Organizations	87%	HD
SCC776	Software Engineering	93%	HD
SCC778	Data Mining	87%	HD
SIT781	Introduction to Bioinformatics	95%	HD

Computer Skill at NIIT:

Semester	Modules	Courses	Grade (%)
#1. SMJ	#MT1	Computer Overview, DOS, Computer Concepts, Windows NT, Networking Concepts, MS Word, Understanding Internet, and Introduction to HTML	90.0
	#MT2	MS Excel, MS PowerPoint, Emerging Trades, MS Access, Application Development, MS Outlook, MS Binding	92.0
#2. SMK	#MT1	UNIX, Programming Language & Techniques, C++	88.0
	#MT2	RDBMS using MS SQL Server 7.0	88.0
#3. SML	#MT1	Visual C++ (Win32 API Programming, MFC)	89.0
	#MT2	Administrating Windows NT Server 4.0, TCP/IP	86.0
#4. SMC	#MT1	Visual Basic Programming (Desktop & Distributed)	77.0
	#MT2	COM Programming using Visual C++	84.0

Computer Skill at Institution of Engineers', Bangladesh:

Courses	Grade
Understanding System Administration, Networking & ISP Setup with RedHat Linux <i>Course Includes:</i> <ol style="list-style-type: none"> 1. Installation of Linux with Windows 2000 Server 2. XWindow Configuration 3. Linux System Administration 4. Data Backup and Restore 5. Disk Space Management 6. Domain Name System (DNS) Server Configuration 7. Mail Server Configuration (using Sendmail) 8. UUCP Client/Server Configuration 9. FTP Server Configuration 10. DHCP Client/Server Configuration 11. Web Server Configuration (using Apache) 12. Proxy Server Configuration (using Squid) 13. Security Modeling and IP Masquerading 14. PPP Dial-in and Dial-out Server Configuration 15. Samba Installation and Configuration 16. Radius Server Configuration (using Cistron) 17. Terminal Server Configuration (using Portslave) 18. Web Mail Configuration (combined PHP4, C-Client, Apache and MySQL Setup and Configuration) 	B (70% – 79%)

Projects at Deakin as a Developer:

Sem.	Project Description	Tools Used	Grade
#1	Simple XML Parser	MS Visual Basic.NET 2003	100.0%
#2	Unix <i>find</i> command Emulator	MS Visual Basic.NET 2003	100.0%
#3	Email Client based on Web Services	MS Visual Basic.NET 2003	89.0%
#4	Student Marks Management System (SMMS)	<i>Front-end:</i> MS Visual Basic.NET 2003 <i>Database Connectivity:</i> ADO.NET <i>Project Management:</i> MS Project 2003 <i>Back-end:</i> MS Access 2003 <i>Modeling:</i> MS Visio 2003	96.7%
#5	Website for a game development company (Virtual XI)	<i>Front-end:</i> XHTML 1.0 <i>IDE:</i> Macromedia Dreamweaver MX 2004 <i>Scripting:</i> JavaScript	100.0%
#6	Chat Client/Server System (DoubleTalk)	<i>Front-end:</i> Java2 Swing <i>IDE:</i> JCreator LE 3.0 <i>Language:</i> Java2 5.0	100.0%
#7	Video Rental/Inventory System (DoubleVision)	<i>Front-end:</i> Java2 Swing <i>Language:</i> Java2 5.0 <i>IDE:</i> JCreator LE 3.0 <i>Back-end:</i> Oracle 9.2 <i>Connectivity:</i> Oracle JDBC	100.0%
#8	Web Server (DoubleSpace)	<i>Front-end:</i> Java2 Swing <i>Language:</i> Java2 5.0 (Java NIO & Java SSL) <i>IDE:</i> JCreator LE 3.0	100.0%

Projects at NIIT as a Solution Developer:

Sem.	Project Description	Tools Used	Grade
#1.	Accounts Receivable System	MS Access 2000	90.0%
#2.	Video Library Application	MS SQL Server 7.0	96.0%
#3.	Airways Ticketing & Reservation	MFC using Visual C++ with MS Access 2000 as database and Seagate Crystal Reports	98.0%
#4.	Online Banking	Visual Basic 6.0 and MS SQL Server 7.0	97.0%

Non-Technical Presentations:

Location	Group Theme	Presentation Topic	Grade
Sem#1 at NIIT	“Microsoft Corporation was among the first PC software companies, and remains one vision of the most successful survivors from the earliest directions and trends days of desktop computing.” Study this statement from the given five angles, and account for this position of dominance.	Operating Systems <i>Position:</i> 3 rd Speaker & Group Leader	90.0%
Sem#2 at NIIT	The aim is to study the various parameters that account for the phenomenally fast growth of the IT industry in the country. This growth obviously has many dimensions to it – imports, exports, hardware, software, computer applications, government policies, profitability, growth management, education and training, programming and development skills, infrastructure, etc. Your group is asked to identify the leading five parameters, in order of priorities that can account for this growth – and how they jointly account for the overall growth.	Infrastructure <i>Position:</i> 1 st Speaker & Group Leader	96.0%

Sem#3 at NIIT	Earlier there were numerous languages to deal with. However, since the advent of C, there has been a major drift towards C. Further, with the growing awareness of object-oriented concepts, the emphasis shifted to C++. The further development has been the advent of Visual C++. This growth has to be studied from root-causes through the identification of various products, parameters, concepts, etc. This study has to be carried out by the group.	Compare C++ and Visual C++ listing advantages and disadvantages in specific application contexts. : C++ vs. Visual C++ Position: 5 th Speaker & Group Leader	97.0%
Sem#4 at NIIT	Same as #3	Same as #3 (with MS PowerPoint Presentation)	94.0%
Sem#1 at Deakin	Multicultural Project Team	In partnership with Anish Babu S C Pillai (with MS PowerPoint Presentation)	80.0%

Technical Presentations (Seminars) Skill:

No.	Seminar Topic	Seminar Topic Covers	Grade (%)
1.	Video Library Application	Naming Conventions, Database Design, Entity-Relations Diagram, Validations Performed, and Suggested Enhancement	97.0
2.	Airways Ticketing & Reservation	Naming Conventions, Database Design, Entity-Relations Diagram, Validations Performed, Visual Interface Demonstration, and Suggested Enhancement	90.0
3. 4. 5.	Student Mark Management System	Project Management, Requirements Analysis, Modeling, Implementation, and Suggested Enhancement	97.0, 100.0, 97.0

Short Courses at NIIT:

No.	Course
1.	Programming with Java
2.	Client-Side Scripting using JavaScript and VBScript
3.	Dynamic HyperText Markup Language (DHTML)
4.	Active Server Pages (ASP)
5.	Analyzing Requirements and Defining Solutions Architecture
6.	Extensible Markup Language (XML)
7.	Wireless Application Protocol Markup Language (WML)

LANGUAGE SKILLS:

1. Full proficiency with reading, writing and speaking of English (Overall band score 8 in IELTS).
2. Full proficiency with reading, writing and speaking of Bangla (National Accreditation Authority for Translators & Interpreters Ltd (NAATI) accredited translator from English to Bangla).
3. Full proficiency with speaking Hindi.

OTHER SKILLS:

1. Strong and proven communication skills, both verbal and written, as described.
2. Leadership skills.
3. As an IT journalist over 200 reports have been published in leading daily magazines' IT Page and monthly magazines regularly since last 3 years in Bangladesh.
4. As a professional I am highly focused and result oriented.

AWARDS:

1. Endeavour International Postgraduate Research Scholarship (IPRS), Australian Federal Government, Australia.
2. Melbourne International Research Scholarship (MIRS), The University of Melbourne, Australia.
3. Research Training Scheme (RTS), Commonwealth Government of Australia.
4. Melbourne Research Scholarship (MRS), The University of Melbourne, Australia.
5. Contributor of the Year 2002, Daily Ittefaq, Information Technology Page, Dhaka, Bangladesh.
6. 3rd Prize, 19th National Science and Technology Week 95-96 (Central), organized by the Ministry of Science and Technology, Govt. of Bangladesh.
7. 1st Prize, 19th National Science and Technology Week 95 (Dhaka-West), organized by Notre Dame Science Club under guidance of the Ministry of Science and Technology, Govt. of Bangladesh.
8. 1st Prize, 17th National Science and Technology Week 93 (Dhaka-West), organized by Notre Dame Science Club under guidance of the Ministry of Science and Technology, Govt. of Bangladesh.
9. Honorable Mention for the Notre Dame Computer Club Man of the Year '96, Notre Dame College, Dhaka, Bangladesh.

PARTICIPANTS:

1. SoftFair 2001, organized by North South University Computer Club, Bangladesh.
2. Programming Contest of Electro Computer Days 2000, organized by Association of Computer & Electrical Students, BUET, Bangladesh.
3. 17th National Science and Technology Week 93-94 (Central), organized by the Ministry of Science and Technology, Govt. of Bangladesh.

MEMBERSHIP:

1. Professional Member (Provisional), Australian Computer Society, Australia (since 2005).
2. Founder and Life-time member, Bangladesh ICT Journalist Forum, Bangladesh (since 2003).
3. Former Project Organizer, Notre Dame Computer Club, Notre Dame College, Dhaka, Bangladesh (1995-1996).
4. Former Project Secretary, Notre Dame Science Club, Notre Dame College, Dhaka, Bangladesh (1996-1997).
5. Life-time Member, Notre Dame Science Club, Notre Dame College, Dhaka, Bangladesh (since 1996).

PERSONAL INFORMATION:

NAME: Mohammad Maruf Hossain
BSc (Hons) *Dhaka*, GNIIT, MIT *Deakin*, MACS (Prov)

ADDRESS: 2/9 Rainsford Street, Elwood, Victoria 3184, Australia

PHONE NO: +61 4 3203 6021

EMAIL: maruf42@gmail.com, hossain@csse.unimelb.edu.au

URL: www.maruf42.com, www.csse.unimelb.edu.au/~hossain

PLACE OF BIRTH: Dhaka, Bangladesh

DATE OF BIRTH: 25 November 1979

NATIONALITY: Bangladeshi (by Birth)

RESIDENCY: Australia

REFEREE:

1. Dr. James Bailey, Research Director and Senior Lecturer, Department of Computer Science and Software Engineering, The University of Melbourne, email: jbailey@csse.unimelb.edu.au, Phone (Work): 8344 1319
2. Professor Rao Kotagiri *FIEAust*, *FTSE*, *FAA*, Professor, Department of Computer Science and Software Engineering, The University of Melbourne, email: rao@csse.unimelb.edu.au, Phone (Work): 8344 1301