Mohona Gazi Meem

Dhaka, Bangladesh

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March, 2013

To Graduate Assistant Recruiter Rochester Institute of Technology

Dear Sir/Madam.

I am interested in the graduate assistant position advertised at your website. My resume is enclosed for your review and you can also take a look at my portfolio at www.codomaniacs.com/gazi. Given my related experience and excellent capabilities I would appreciate your consideration for this job opening. I believe that my qualifications are an ideal match for this position, and I am confident that I would make a valuable and immediate contribution to your operations.

The following are highlights of my qualifications:

- Sincere, hard-working, trustworthy, ambitious, reliable
- Posses excellent time-management, communication, organizational, listening and learning skills
- Cooperative and work well independently as well as in team
- Ability to work on multiple projects at the same time

#### Technical skills:

- Ability to work in any operating system and software
- Model and simple animation building experience with Blender
- Design and Development of websites, game and android application
- Design images with Adobe Photoshop and Illustrator
- Network and system administration and software development

I would welcome a personal interview at your earliest convenience to discuss your needs and objectives and the possibility of working together to meet them. Thank you for your time and consideration.

Sincerely,

Mohona Gazi Meem

University ID# 305001519

# Mohona Gazi Meem

Tel: +8801671963156 meem.fbi@gmail.com info@codomaniacs.com www.codomaniacs.com/gazi

## **EDUCATION**

#### **Bachelor of Science in Electronics and Communication Engineering**

BRAC University, Dhaka, Bangladesh

May 2008- April 2012

Major: Electronics Engineering & Communication Engineering

Minor: Computer Science

Thesis: Eagle-iBot: An eye controlled system

CGPA: 3.48/4.0

#### **Higher Secondary Certificate**

Viqarunnisa Noon School & College, Dhaka, Bangladesh

2007

GPA: 4.80/5.00

#### **Secondary School Certificate**

Viqarunnisa Noon School & College, Dhaka, Bangladesh

GPA: 5.00/5.00

2005

#### TECHNICAL SKILLS

- Programming Languages & Experiences: Java (SE, ME, EE), C, C++, C#, Matlab, Octave, Python, Assembly, PHP, CSS, HTML, XML, Jscript, JSP, My SQL
- Frameworks & CMS: Codeigniter, Joomla, Wordpress, Sphinx, Neuroph
- Game Design & Development, Graphics & Animation: OpenGL, Blender, jMonkey,
   Ogre, Scene Composer, JScene, Java 3D
- Image Processing tools: OpenCV, Java advanced Imaging, Java 2D, Matlab, Octave
- Electronics: Embedded system design & programming, VLSI, Digital system development,
   Micro-controller (PIC, AVR, Atmega), FPGA
- Robotics Simulation: Microsoft Robotics Studio
- **Mobile Application Developments:** J2ME, Android
- **OS:** Windows, Ubuntu, Linux, Backtrack

#### RESEARCH EXPERIENCE

 Semi-autonomous & Wi-Fi contolled lunar Excavation Robot "Chondrobot V.2" for NASA's Lunabotics Mining Competition

Affliation: BRAC University | NASA Kennedy Space center, FL

- Made the robot semi-autonomous using Webcam and Kinect which was able to detect obstacles, lunabin and sidelines.
- Developed a path planning algorithm.
- Worked on the design and development of the control circuit and mechanical
  - o construction with fellow team mates.
  - Troubleshot all software and coding problems.
- Eagle i-Bot: An eye controlled system for Imagine Cup and Thesis:

Affliation: Team MOR | Microsoft Bangladesh | Grameen Phone IT

- Programmed Real-time Eye and Iris Detection using OpenCV library.
- Trained and tested Eye and Iris position detection using Neuroph, Matlab and OpenCV Haar Training and Classifier.
- Customized dictionary and programmed Speech recognition using Sphinx
- Programmed event handling.
- Developed the GUI.
- o Established RS 232 communication between PC and the robot.
- Designed and Developed the interfacing, motor control and switching circuit using PIC 16F877, customized a RC controlled car's circuit.
- A first person 3D Game "Holy Grail hunt" compatible with Windows and Android:
  - Worked with physics, gravity, lighting, shadows, skyboxes, collision, terrain, bounded box and cameras in jMonkey.
  - Created animated model and designed a gothic game environment using Ogre,
     Scene Composer, Jscene, Blender with exciting sound effects.
- Electronics devices and gadgets:
  - LED Propeller Display
  - o Reaction Time Game
  - Multi-Color Display Board
  - Digital Thermometer
  - English and Bangla Real Time Clock
- PIC Trainer Board
- Radio Transmitter
- Solar Charger Controller
- Digital Door Lock

- Robots:
  - Line Follower Robot
  - Obstacle Avoidance Robot
  - Cell Phone Controlled Robot
- Spy Robot
- o A Simple Bi-Pedal Robot

## WORK EXPERIENCE

For the last two years, I have been working as a free-lancer and providing services in the following fields:

- Website design and development
- Mobile application development
- Commercial software development
- Electrical consultancy

### SPECIAL TRAINING

- 1. "Ethical Hacking and Countermeasures", Academy of Management and Science, Bangladesh. (Enrolled)
- 2. "Micro-controller", Pi Labs, Bangladesh.

#### **PUBLICATION**

#### Journal Publication

M. G. Meem, O. Afrin, M. M. Hassan, F. H.Bhuiyan, M. K. Rhaman, "Eagle i-Bot: An Eye-controlled System", IOSR Journal of Computer Engineering (IOSRJCE), Volume 7, Issue 2, PP 23-28, 2012

## Technical Papers

- 1. "BRACU Chondrobot 2 System Engineering Paper", NASA Lunabotics Mining Competition, 2012.
- 2. O. Afrin, M. G. Meem, M. M. Hassan, "The implementation and concept of Eagle i-Bot using Neuroph", 2012. (In progress)

## SCHOLARSHIP AND GRANTS

- 40% waiver for 3 semesters from BRAC University
- Travel grant from BRAC University and Robi Axiata Limited

# AWARDS AND NOTABLE PARTICIPATIONS

- GP-IT Most Innovative Concept Award, Team- MOR, Imagine Cup 2012, sponsored by Grameen Phone and Microsoft, Bangladesh
- One of the Top 9 contestants at regional round of Bangladesh, Team- MOR, Imagine Cup 2012, sponsored by Microsoft, Bangladesh

- NASA Lunabotics Mining Competition 2012, (12<sup>th</sup> in Joe Kosmo) & (13<sup>th</sup> in mining category) & (1<sup>st</sup> among Asian teams), Team-Chondrobot-2
- Vice Chancellor's Honor for BRACU Chondrobot-2
- Winner of BRACU Best Robot Design, 2012
- Prime Minister's Honor for meritorious result in SSC, Bangladesh
- The Daily Prothom Alo's Honor for meritorious result in SSC, Bangladesh

## **Memberships**

- Bangladesh Astronomical Association
- BRACU Robotics Club
- Dhaka University Karate Association

#### EXTRACURRICULAR ACTIVITIES

- Yellow belt in Judo and Karate
- First runner up, Chess 2009, BRAC University
- Best Athlete, Viqarunnisa Noon School & College
- Winner of many awards, Vigarunnisa Noon Science fairs
- Best volunteer and worker, Viqarunnisa Noon Science Club

#### REFERENCES

• Dr. Mumit Khan

Professor and Chairperson (On leave), Department of Computer Science and Engineering (CSE) BRAC University mumit@bracu.ac.bd

Dr Md Khalilur Rhaman

Assistant Professor, Department of Computer Science and Engineering (CSE) BRAC University <a href="mailto:khalilur@bracu.ac.bd">khalilur@bracu.ac.bd</a>

• Mr. Farazul Haque Bhuiyan

Lecturer, Department of Computer Science and Engineering (CSE) BRAC University bhuiyan@bracu.ac.bd

Mr. Imran Ahmed

Lecturer, Department of Computer Science and Engineering (CSE) BRAC University
Imran@bracu.ac.bd

Dr. Mohammed Belal Hossain Bhuian

Assistant Professor, Department of Electrical and Electronic Engineering (EEE) BRAC University

belal.bhuian@bracu.ac.bd

## SELECTED PRESS AND MEDIA COVERAGE

- Daily Sun, Robotics team from BRAC attends NASA's mining contest, July 27, 2012.
   <a href="http://www.daily-sun.com/details-yes-27-07-2012">http://www.daily-sun.com/details-yes-27-07-2012</a> Robotics-team-from-BRAC-attends-NASAsmining-contest 216 1 3 1 10.html
- Bangla News 24, Asia's best robotics team "ChondroBot -2" in LMC, July 26, 2012. <a href="http://www.banglanews24.com/English/detailsnews.php?nssl=62b91df0b51ee76ce66f2">http://www.banglanews24.com/English/detailsnews.php?nssl=62b91df0b51ee76ce66f2</a> fa6874afbb8&nttl=2012072748550&toppos=6
- The Daily Samakal, Top ten innovation of Imagine Cup, May 5,2012
- Microsoft Imagine Cup 2012, Computer Bichitra, June 2012, VOI-16, No-11
- The Daily Star, Chondrobot, May 17, 1012
  <a href="http://www.thedailystar.net/newDesign/photo-gallery.php?pid=234547">http://www.thedailystar.net/newDesign/photo-gallery.php?pid=234547</a>
- The Daily Prothom Alo, Chondrobot-2 is ranked twelve at NASA's competition, July 29, 2012.
  - http://www.prothom-alo.com/detail/date/2012-07-29/news/277578
- The Daily Azadi, Asia's best robot is BRAC's Chondrobot-2, July 28, 2012
  <a href="http://www.dainikazadi.org/details2.php?news">http://www.dainikazadi.org/details2.php?news</a> id=3106&table=july2012&date=2012-07-28&page id=6&view=0&instant status=0
- The Financial Express, Robot expo held at BRAC University, 2012. http://www.thefinancialexpress-bd.com/more.php?news\_id=126474&date=2012-04-12
- The Daily Samakal, Robotics exhibition at BRAC University, April 12, 2012.
- The independent, BRACU holds Robot exhibition, April 12, 2012.
- The Daily Prothom Alo, May 19, 2012.
  <a href="http://eprothomalo.com/index.php?opt=view&page=1&date=2012-05-19">http://eprothomalo.com/index.php?opt=view&page=1&date=2012-05-19</a> (Page 17)
- Chondrobot-2 on ATN news, 2012.
  <a href="http://www.dainikazadi.org/details2.php?news">http://www.dainikazadi.org/details2.php?news</a> id=3106&table=july2012&date=2012-07-28&page id=6&view=0&instant status=0
- Chondrobot-2 on Bangla Vision news, 2012. http://youtu.be/21NmZmHoMrQ
- Chondrobot-2 on Channel 24 news, 2012. http://youtu.be/sRraKlceUAg
- Chondrobot-2 on Channel I news, 2012. http://youtu.be/5VDmhlAOOK4
- Chondrobot-2 on ETV news, 2012.
   http://youtu.be/69jKo\_vVtPk
- Chondrobot-2 on Independent news, 2012. http://youtu.be/BOXhIUIqpvc
- Chondrobot-2 on NASA Edge, Kennedy Space Center, 2012