

Fahmid Morshed **Fahid**

COMPUTER SCIENCE AND ENGINEERING STUDENT · BUET
305 Titumir Hall, BUET, Palashi, Dhaka, Bangladesh

☎ (+880) 1723621163 | ✉ fahmid.morshed.fahid@gmail.com | 📷 FahidMorshed | 📺 Fahid Morshed | 🐦 FahidMorshed

Education

Bangladesh University of Engineering and Technology (BUET)

Dhaka, Bangladesh

B.S. IN COMPUTER SCIENCE AND ENGINEERING

October, 2011 - PRESENT

Current Level: 4-1

- **CGPA: 3.63 out of 4** (Up-to Level 3-2)
- CGPA of last term: 3.63
- Major: *Computer Simulation & Modeling*
- Minor: *Government*
- Thesis topic: *Map Digitization*

Dhaka City Collage

Dhaka, Bangladesh

HIGHER SECONDARY CERTIFICATE IN SCIENCE

2009-2011

GPA 5.0 out of 5.0 in all subjects

Barisal Zilla School

Barisal, Bangladesh

SECONDARY SCHOOL CERTIFICATE IN SCIENCE

2007-2009

GPA 5.0 out of 5.0 in all subjects

Technical Skills

PROGRAMMING LANGUAGE

Proficient **C, C++, Java, PHP, SQL, BASH, HTML, CSS, Assembly Language,**

Familiar **C#, Python, JavaScript, Pascal, Basic,**

DATABASE MANAGEMENT SYSTEM (DBMS)

Proficient **MySQL, Oracle,**

Familiar **SQLite,**

FRAMEWORKS, ARCHITECTURES & LIBRARIES

Proficient **MVC, Code Igniter, Bootstrap, Android** , Basic C/C++ Libraries, Java Libraries

Familiar **Ajax, JQuery, Dot NET,**

DEVELOPMENT TOOLS

Proficient **Eclipse, MS Visual Studio, Code Blocks, Sublime, XAMPP, NS2, Proteus, MS Visio, Creatly, Prezi,**
Cisco Packet Tracer, Terminal (Linux),

Familiar **Dreamweaver, Android Studio, Net-Beans, Vim, Turbo C++, Notepad++, MATLAB, Command Prompt (Windows), Maya 3D Modeling, 3D Studio Max, Adobe Premier Pro,**

GAME ENGINES

Proficient **Unity 3D, Unity 2D,**

Familiar **Game Maker Studio, Unreal Engine,**

VERSION CONTROL

Proficient **Git (GitHub),**

OTHER TECHNICAL LANGUAGES

Proficient **Unified Modeling Language (UML), Tex (LaTex),**

HARDWARE

Proficient **AVR Family (AtMega-32), Intel 8086 Microprocessor,**

Familiar **Intel x86 architecture,**

Projects

Game: Snake

PYTHON

Python built-in library **Turtle** was used to simulate real time 2D graphics. Basic input-output and scoring were created. No game-loop was used. No file system to store scores. No sound mechanics.

Class Project

Level 1-1

Game: Ant Smasher

C

A modified version of C's graphics library (**graphics.h**) called **iGraphics.h** was used to make a point & click 2D game. A file system was implemented memorize high score. Basic in-game sound were used on a loop. No game-loop was used and no security measures were developed (MD5).

Class Project

Level 1-2

Game: Jumping Ju

JAVA

It was a platformer game. A small scale **game-engine** (only physics, animation and rendering) was built using built-in java libraries like Java.Util, Javax.Swing, Java.AWT etc. On top of that a basic game-loop was created. Multiple layers were used to make illusion of 3D graphics. A separate sound package was created along with the engine package. Scoring system was protected via **MD5**.

Class Project

Level 2-1

Game: Catch The Egg

ASSEMBLY LANGUAGE X86

The game was created using basic assembly language (**MIPS**). **Emu8086** was used to simulate. Several functions were used by using built-in push-pop stack mechanism. Graphics were rendered pixel by pixel. No file system was used nor any sound were created.

Class Project

Level 2-2

Information System: Online Food Ordering Service

DATABASE DESIGN

First, **UML diagrams** for database were created and then using **PHP** and **SQL**, **Oracle Database** was connected to implement that design on a website (backend). To create the front-end of that website, **HTML**, **CSS** were used. **XAMPP** were used (only for **Apache**) and **MySQL** were left out as Oracle database were manually connected for this project. No framework was used. **GitHub** was used for version control.

Class Project

Level 3-1

Information System: Local Government Automation

INFORMATION SYSTEM DESIGN

Case studies were done on the system and different sorts of **UML diagrams** (i.e. use case diagram, sequence diagram, collaboration diagram, activity diagram, class diagram etc.) were created using **MS Visio**. No actual implementation.

Class Project

Level 3-1

A Modified Pascal Compiler

COMPILER DESIGN

A compiler was designed using **Lex (FLEX)** and **Bison** to generate lexical analyzer and parser on Linux system. Language C was used to implement these and to compile, Terminal of Ubuntu was used.

Class Project

Level 3-1

Energy Power Aware Routing AODV Protocol

NETWORK SIMULATION

To simulate different improvements on different matrices like Power, Energy, Jagger, Packet loss Network Simulator 2's (**NS2**) internal files (aodv.cc, aodv.h, mobilenodes.h, mobilenodes.cc etc) were modified and measured. Also, **Cisco Packet Tracer** were used to simulate the network and change different parameters.

Class Project

Level 3-2

Information System: Online House Rental Service

INFORMATION SYSTEM DESIGN

Case studies were done on the system and different sorts of **UML diagrams** (i.e. use case diagram, sequence diagram, collaboration diagram, activity diagram, class diagram etc.) were created using **MS Visio**. **Apache** and **MySQL** were used (XAMPP) and the backend was controlled by **PHP**. **MVC architecture** was followed using **Codeigniter framework**. For frontend design (**HTML**, **CSS**), **Bootstrap** was used. **Dreamweaver** was used to modify the frontend design. **GitHub** was used for version control.

Class Project

Level 3-2

Game: Runner

UNITY 2D

Experimented with Unity 2D game engine. Learned about **Sprites**, **Game Loop**, **Physics**, **Collision Vector**, **Animation etc** on different online courses like Lynda.com. An endless runner type game on android platform was created that supports touch and accelerometer. Not complete.

Self Interest

2013

Game: An Explorer

Self Interest

UNITY 3D

2014

Experimented with Unity 3D game engine. Learned about **3D Modeling, Polygons, Mesh, Wire-frame Model, Particle Effect, 3D Vectors, Rendering Optimization etc** on different online courses like Lynda.com. A miniature game on windows platform was created that simulates these. Not complete.

Seminars, Conferences and Talks

Workshop	9th International Workshop on Algorithms and Computation (WALCOM 2015) , BUET	Attended
Conference	2nd International Conference on Networking System and Security (NSysS) , BUET	Attended
Seminar	Seminar on expected improvements in Smartphones by Samsung , BUET	Attended
Seminar	Large scale production clusters in Amazon web services , BUET	Attended
Talk	Zero to Infinity Talks: Freelancing Career in Web Development , Dhaka University	Attended
Contest	BUET Intra-university Programming Contest - 2014 , BUET	Volunteered
Seminar	Seminar on Microsoft Imagine Cup 2015 , BUET	Attended
Workshop	Workshop on National Hackathon , BUET	Volunteered
Contest	Inter University Unknown Programming Language Contest - 2013 , BUET	Volunteered
Talk	Become a Microsoft Intern and Brand Ambassador , BUET	Attended
Talk	Zero to Infinity Mega Talks on Social Entrepreneurship , Dhaka University	Attended

Associations

BUET Computer Club

BUET

MEMBER

2013 - PRESENT

- Organize inter and intra university programming contests.
- Organize different seminars and talks like Seminar on ACM programming contests
- Member recruit on campus club fair.

BUET Software and System Development Association(BSSAD)

BUET

ORGANIZER

2014 - PRESENT

- Organize different seminars on Software Development and Hackathon.
- Organize yearly Intra-University Hackathon Championship.

BUET Film Society

BUET

MEMBER

2012 - PRESENT

- Organize different film festivals.

Satyen Bose Club

BUET

MEMBER

2012 - PRESENT

- Organize different Science fair.

Dhanshiri - BUET Students Association of Greater Barisal

BUET

MEMBER

2012 - PRESENT

Extracurricular Activities

2015	4th Place , Unknown Language Programming Contest	BUET
2014	Participant , Inter University Programming Contest	BUET
2015	Participant , National Hackathon 2015	Dhaka
2014	Participant , UNICEF Meena Gaming Contest	Bangladesh
2013	Semi-finalist , BUET Chess Championship 2013	BUET
2015	Finalist , Inter University Puzzle Contest	BUET
2015	Winner , CSE Fest 2015 Cricket Tournament	BUET
2015	Semi-finalist, Fifa 14 , Intra University Gaming Competition	BUET
2013	Assistant Director & Script Writer (Short Films) , Trishna, Valobashar Vasha	
2013	Director (Music Video) , Somoyer Othithi by Cosmic Ray	

Interests

Video Games

PC, PLAYSTATION, XBOX

Regularly follow the latest news. A regular member of the developer's blog called Gamasutra.com. An active member of IGN.com and GameSpot.com. Follow different game creator (mostly programmers) in twitter and facebook. Also, I play a lot of indie games and AAA titles.

Movie & TV Series

MAKING, WATCHING & REVIEWING

Like to follow IMDB.com, RottenTomatoes.com as well as different international critics and film makers. Try to make short films and write scripts. Write reviews on IMDB.com occasionally.

Reading

STORY BOOKS

Read different regional and international books, mostly fictions and historical fictions. Always follow goodreads.com to get updates. My favorite writer is Shirshendu Mukhapaddhay (Regional) and Agatha Christie (International)

Technology

LATEST AND UPCOMING

Follow Techcrunch.com regularly. Technology like augmented reality or Holo Processing Unit (HPU) fascinates me.

References

1. Dr. Mohammad Mahfuzul Islam

PROFESSOR

Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology

Contact Information

email: mahfuz@cse.buet.ac.bd

phone: +880 1913071907

2. Dr. Md. Abul Kashem Mia

PROFESSOR

Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology

Contact Information

email: kashem@cse.buet.ac.bd

phone: +880 1819259910