

Moaz Mahmud

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EXPERIENCE

REVE Systems

Feb. 2021-Present

Junior Software Engineer

- I am working in E-Governance Department of the company in Bangladesh development office
- Main responsibility is Back-end Engineer
- Currently I am working as a Java Back-end Engineer on Parliament Resource Planning (PRP) project for Bangladesh National Parliament.

EDUCATION

Bangladesh University of Engineering and Technology

CGPA: 3.56/4.0

Bachelor of Science in Computer Science and Engineering

Feb. 2016 – Feb. 2021

Higher Secondary School Certificate

GPA: 5.0/5.0

BAF Shaheen College, Jessore

Aug. 2015

Secondary School Certificate

GPA: 5.0/5.0

BAF Shaheen College, Jessore

Apr. 2013

TECHNICAL SKILLS

Languages: C/C++, Javascript, Python, Java, C#, L^AT_EX, SQL, Bash Script, HTML/CSS

Competitive Programming : Problem Solving, Algorithm, Data Structure

Frameworks: Bootstrap, PyGame, Laravel

Developer Tools: Git, Visual Studio, VS Code, Jupyter Notebook, NetBeans, Eclipse

PROJECTS

Fill 2D Space with Hilbert Curve | *p5js, JavaScript, ES6* | [View Project](#) | [View Source](#)

August 2021

- Hilbert Curve is a space-filling curve. That means this 1-D line can fill a 2-D space! This fact on its own is amazing! The mathematical and algorithmic knowledge inspired me to make something cool with it!
- In this project, the user can see the Hilbert Curve of various generations fill a 512x512 canvas.
- The hue mapping leads to a fascinating image of filled space. Users can also upload their own image to be filled by Hilbert Curve which creates a mesmerizing astristic filter!

Bangladeshi Number Format Util | *Python, Java, Java Stream, JavaScript, ES6* | [View Source](#)

July 2021

- This is a project to convert any Bangla or English number string into Bangladeshi number format which is the Core-Lakh system.
- Given a number string, getFormattedNumber would return another string that is thousand and hundred separated by comma. Given a number string, convertToWord returns another string which is the number in word.

Tic Tac Toe | *Python, PyGame, Minimax algorithm* | [View Source](#)

July 2020

- Frontend game play is implemented in PyGame
- Build an AI to play Tic Tac Toe with Minimax algorithm in Python

Ray Tracer from Scratch | *C++, OOP, OpenGL* | [View Source](#)

September 2019

- Implemented a ray tracer along with shading from scratch
- OOP is used to manage draw various shapes

Park Your Car | *Laravel, phpMyAdmin, Google Map API, HTML, CSS, JavaScript*

September 2019

- Web-based car parking sharing service implemented in a three members group
- Used Google map API for showing and searching for parking spaces
- Backend is managed in Laravel
- phpMyAdmin is used to manage database

ONLINE JUDGE PROBLEM SOLVING

LightOJ [@mz_mahmud](#)

- Solved 151 problems.
- My common work flow is learning an algorithm and solving the categories.

Hacker Rank [@MzMahmud](#)

- Gold Level in C++,Python.
- Silver Level in C,Problem Solving.

Project Euler [@MoazMahmud](#)

- Solved 67 problems.
- As a math enthusiast I like solving math problem with programming.

ACHIEVEMENTS

Networking, Systems and Security *7th NSysS 2020*

Nov 2020

- Runner-up Student Poster Award for *A Heuristic for Maximum Greedy Consensus Tree Problem*
- With S. M. Raihanul Alam

ACM ICPC Dhaka Regional Online Preliminary Contest

2016-18

- 2016 - Team BUET RDX : Position 122 out of 1235
- 2017 - Team BUET NAIVE: Position 75 out of 1246
- 2018 - Team BUET NAIVE: Position 164 out of 1326

National High School Programming Contest 2015 Khulna Regional (Senior)

April 2015

- 2nd position among 65

Bangladesh National Math Olympiad

2011-15

- National Round : 2nd runner Up (2015), 1st runner Up (2014)
- Divisional Round: Champion (2015), 2nd runner Up (2014), 1st runner Up (2013), Champion (2011)

VOLUNTEER EXPERIENCE

Academic Team Member

2015-Present

Bangladesh National Math Olympiad

- Conducted more than 12 regional Olympiads, 4 national Olympiads
- Organized many question camps and math camps
- Problem setter for various regional math olympiads

Online Education

July 2020-Present

moazmahmud.com/youtube.html

- Uploaded more than 70 lecture videos of around 1 hour each on Math and Physics
- Videos have more than 450 hours of watch time

Mathematics Coach

2017-18

Student Empowerment Program, Volunteers Association for Bangladesh

- Conducted math camps on Nilphamari, Satkhira and Shariatpur

UNDERGRAD THESIS

A Heuristic for Maximum Greedy Consensus Tree Problem

2019-Present

- A study to find an approximation algorithm for the NP-hard problem Maximum Greedy Consensus Tree Problem
- The problem has applications in Bioinformatics
- Under supervision of Dr. Md. Saidur Rahman