

# Rafi Hassan Chowdhury



+880 1701459732



rafi hassan@iut-dhaka.edu



Mirbag, Moghbazar, Dhaka



[github.com/Grumpy-Frog](https://github.com/Grumpy-Frog)



[linkedin.com/in/rafi-hassan-b9b63ala6](https://linkedin.com/in/rafi-hassan-b9b63ala6)

## Education

---

### Islamic University of Technology

2020 - Present

*B.Sc in Computer Science and Engineering*

CGPA: 3.61 out of 4.00

### Dhaka College

2017 - 2019

*Higher Secondary School Certificate*

GPA: 5.00 out of 5.00

### Faizur Rahman Ideal Institute

2007 - 2016

*Secondary School Certificate*

GPA: 5.00 out of 5.00

## Skills

---

- **Programming Languages:** C, C++, C#, Java, Python, Assembly
- **Libraries/Frameworks :** Django, OpenCV, OpenGL, JavaFX
- **Tools/Platforms:** GitHub, Jira, Linux
- **Databases:** SQL, MySQL, SQLite
- **Game Engine:** Unity, Unreal Engine
- **System Software:** Android Studio
- **Machine Learning**
- **Software Development**
- **Web Development**
- **Problem Solving**
- **Team Management**

## Projects

---

### Untitled Tank Game   GitHub Link

- **Language:** C++
- **Framework/Technologies:** SFML, Adobe Photoshop, GIMP
- **Description:** A 2D top-down shooter with PvP Deathmatch and cooperative Defense modes. Players level up, face AI enemies, and use power-ups and pick-ups (speed boosts, XP, shields). Handcrafted 2D sprite animations and entirely self-made game assets for a unique gaming experience.

### Untitled Survival Game   GitHub Link   Itch.io Link

- **Language:** C++, GLSL
- **Framework/Technologies:** OpenGL, OpenAL, Blender, MagicaVoxel
- **Description:** A 3D horror puzzle game with time-limited maze solving, utilizing Randomized Depth First Search for maze generation. Players face camouflaged grass enemies that react to noise and torch use, powered by A\* pathfinding, and feature custom animations coded in C++.

**Anda Lorai FPS Game**    **GitHub Link**    **Itch.io Link**

- **Language:** C#
- **Framework/Technologies:** Unity, Blender, Photon Network Engine
- **Description:** A 3D FPS multiplayer shooter game where players control eggs, engaging in battles to score points within a set time; Photon Engine (PUN) is utilized for networking.

**Virtual Classroom**    **GitHub Link**

- **Language:** Python, JavaScript, C++
- **Framework/Technologies:** Django, SQLite, Agora RTC, OAuth
- **Description:** An educational website connecting teachers and students, offering Google Authentication, classroom creation, assignments, automatic MCQ exam grading, real-time video meetings with screen sharing, and an article section for knowledge sharing. Users can manage profiles and passwords.

**Untitled-Music-Player**    **GitHub Link**

- **Language:** Java
- **Framework/Technologies:** JavaFX, MySQL
- **Description:** This Music Player offers essential features, including database storage, playback speed adjustment, and metadata-based sorting. It also boasts unique functions like a Frequency Spectrum Visualizer, URL playback, and customizable themes via CSS files.

**DoodleIt: Image to Doodle**    **GitHub Link**

- **Language:** Python
- **Framework/Technologies:** Generative Adversarial Network/ PyTorch
- **Description:** A machine learning project that employs a Pix2Pix Generative Adversarial Network (GAN) to create doodles based on an input image.

**IUTCS\_Website**    **GitHub Link**    **Website\_Link**

- **Language:** Python, JavaScript
- **Framework/Technologies:** Django, PostgreSQL
- **Description:** A website for IUTCS, where they can host intra/inter-university events, facilitate participant registration, and showcase organization updates, blogs, and achievements.

## **Honors & Awards**

---

- Finalist in National Blockchain Olympiad Bangladesh 2023
- Finalist in International Blockchain Olympiad 2023
- Champion of WEB-OFF by IUT Computer Society, 2023
- Programming Contest- 11th in Intra IUT Coderush 1.0, 2023
- Capture The Flag- 11th in Intra IUT Coderush 1.0, 2023
- Participated in The 2020, 2021, 2022, 2023 ICPC Asia Dhaka Regional Site Online Preliminary Contest