

# Hossain Delwar

📍 New York, NY    ✉ hmdelwar718@gmail.com    ☎ 6463747465    in linkedin.com/in/hdelwar/  
🔗 github.com/hmdelwar

## Education

**Syracuse University**, *Bachelor of Sciences in Computer Engineering* Aug 2017 – May 2022 | Syracuse, NY  
Relevant Courses: Intro to Computer & Network Security, Embedded & Mobile Systems Lab, C# and Windows Programming, Intro to AI, Computer Architecture, System & Signal Analysis, Senior Design, Intro to DBMS, Principles of Social Data Mining, Computer Graphics, Operating Systems

**LaGuardia Community College** Mar 2019 – Aug 2020 | New York, NY

## Professional Experience

**Syracuse University**, *Teaching Assistant* Aug 2021 – May 2022 | Syracuse, NY

- Assisted students in comprehending the fundamental concepts of Python and C++ programming.
- Guided students in solving problems and writing scripts in Python, reinforcing their understanding of practical programming applications.
- Conducted lessons on foundational Python concepts, including loops, lists, and variables.
- Covered fundamental data structures like arrays, linked lists, trees, and graphs.

## Personal Accomplishments

### Dean's List

- Spring 2021 (Syracuse University)
- Fall 2020 (Syracuse University)
- Spring 2020 (LaGuardia Community College)

## Projects

### Recyclable Sorting Machine, *Python*

- Collaborated within a team of four to design and build a recyclable sorting machine.
- Trained a TensorFlow model and integrated it with a camera module to help the system identify objects and determine their recyclability based on specific criteria such as weight, shape, and material.
- Developed Python code to manage object movement and employed Arduino sensors to monitor and manage the weight of the objects.
- Successfully conducted test cases with different items including a glass bottle, plastic bottle, glue stick, and cardboard to validate the system's ability to differentiate and categorize items effectively.

### Multiplayer Tic-Tac-Toe, *C#*

- Developed a networked Tic-Tac-Toe game using .NET framework and WPF, enabling two computers to interact with each other in real time.
- Implemented a messaging system where the sender and receiver could exchange game moves, facilitating live gameplay.
- Initially built the game using TCP; further enhanced the application by rebuilding it with UDP to optimize network communication.
- Successfully collaborated within a team to plan, develop, and troubleshoot the application.

### Breakout Game, *C++ and OpenGL*

- Recreated Breakout and incorporated 3D rendering using OpenGL to demonstrate proficiency in graphics programming and C++.
- Developed ball physics for accurate motion, speed, and angle calculations.
- Created a start menu, winning screen, and losing screen to enhance the overall game experience.

## Software Programs

Autodesk Inventor | Linux | WPF | .NET FrameWork  
MATLAB | OpenGL | TensorFlow | Twitter API  
REST API

## Languages

Python | C# | C/C++ | Java | Bash | HTML  
Javascript | SQL