Tanim Choudhury

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# Education

**Kennesaw State University***, Marietta, GA* Expected May 2023

* **Bachelor of Science in Computer Engineering, GPA: 3.88**
* **Relevant Coursework**: Digital Logic Design, Circuit Analysis I, C++ Programming for Engineers, VHDL Design with FPGAs, Advanced Embedded Systems, Computer Organization and Interfacing, Discrete Math, Data Collection & Analysis, Neural Networks & Machine Learning, Data Structures

# Projects

**Servo Memory Game (C)** [(](https://drive.google.com/file/d/1OYaye4f3kx4Yn9HvWYKXpg_LMCIDeY1i/view?usp=sharing)[demo](https://youtu.be/jZ1Y72nhjHQ)[)](https://drive.google.com/file/d/1OYaye4f3kx4Yn9HvWYKXpg_LMCIDeY1i/view?usp=sharing) Nov 2021 - Dec 2021

* Created a Memory Game on the NUCLEO-L476RG with STM32CubeIDE
* Interfaced microcontroller with servo motor, LED, and switch
* Documented device functionality with a technical report

**LED Matrix Pixel Animation (Python)** ([demo](https://youtu.be/SQbnxoqKMxk)) Dec 2021 – Jan 2022

* Produced a pixel animation on Raspberry Pi with Thonny Python IDE
* Interfaced microcontroller with an 8x8 LED matrix from a Sense HAT

**SoulTune** [(](https://youtu.be/SYlVoqt2jUQ)[trailer](https://youtu.be/CzzykoIwL8k)[)](https://youtu.be/SYlVoqt2jUQ) Jan 2021 - Jan 2021

* Created a rhythm game that placed 3rd for the KSU Global Game Jam 2021
* Collaborated with a small team in a remote setting
* Collaborated on the algorithm for the game

# Work Experience

**KSU Student Assistant**, *Marietta, GA,* 10 hr/week Sept 2021 – Present

* Monitored and verified digital circuit designs during weekly labs of 60 students
* General guidance with new components and tools
* Assisted students in debugging circuit designs and digital logic
* Lead a full lab-section alone in applying lecture topics and general guidance

# Skills/Tools

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| --- | --- |
| **Programming:** |  Python, VHDL, C/C++, Java, basic HTML & CSS, ARM(Assembly), basic MATLAB |
| **Hardware:**  | STM32 NUCLEO, Basys 3, Raspberry Pi, Soldering, Oscilloscope  |
| **Software:**  | SSH Linux, LTspice, STM32CubeIDE, Visual Studio Code, Eclipse, Jupyter, numpy, pandas, matplotlib |
| **Communication:**  | Technical Writing, Design Proposals, Microsoft Office Suite, Presentations  |
| **Languages:**  | English, Bengali |