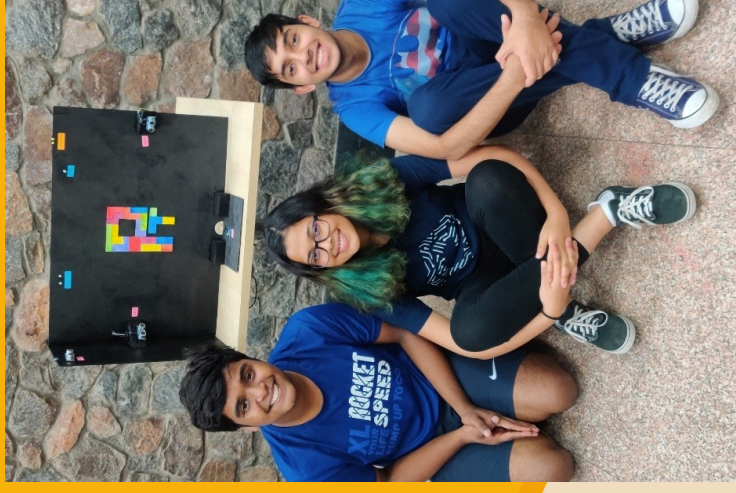


Perceptris

Tetris with a different
perception



MADE BY:
Ananya Lohani 2019018
Ansh Arora 2019022
Divyansh Rastogi 2019464



Crux of the Game

Tetris, the classic retro game from 1980's is implemented with the help of using air gestures. The user is able to feel that he/she is physically moving the tetrominos to play the game.

Single player:

With the help of the framework created, the user is able to control the blocks and move them with simple hand gestures.

Multiplayer:

BLIND TETRIS!

We introduce a fun new way of playing Tetris in which one person would be the eyes for the other person, thereby involving a twist of memory testing for the other player.

Platform:

Processing

Microcontrollers Used:

Arduino Mega

Sensors Used:

Ultrasonic distance sensor, Piezoelectric sensor, Rotary Encoder

Output Modalities:

Multicolor LED, Buzzer, Screen, Speakers



Game Video

<https://youtu.be/RkxJqoUfYXY>

Credits

Game Logic:

<https://www.openprocessing.org/sketch/313016/>

Sensors Code:

<https://learn.sparkfun.com/tutorials/connecting-arduino-to-processing/all>

<https://randomnerdtutorials.com/complete-guide-for-ultrasonic-sensor-hc-sr04/>

<https://create.arduino.cc/projecthub/SURYATEJA/use-a-buzzer-module-piezo-speaker-using-arduino-uno-89df45>

Sound Effects:

<https://www.youtube.com/watch?v=ltv-dyPTnsg>

<https://www.youtube.com/watch?v=63hoSNvS6Z4>

<https://www.youtube.com/watch?v=uetxqmM1fLw>

<https://www.youtube.com/watch?v=wIamg9wSdMg>

