

Perceptris

Tetris with a different perception

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MADE BY:

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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/RkxJgoUfYXY>

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=uexqmMJtLw>
- ❖ <https://www.youtube.com/watch?v=wlamg9wSdMg>