

Percussive Visualizer/ Body Drums

The objective of this project is to develop a real-time game in which a player or two generates percussive sounds in front of a microphone and a VGA display displays a sequence of instructions for the player to perform (a la Taiko Drum Master). The percussive sounds will be filtered to distinguish if a player performs claps, taps, or thumps. Initially the display instructions will be limited to simple shapes; if time allows, further sprites can be developed to enhance the usability of our game. While filtering is an art in itself, the percussive sounds that are performed should be quite distinguishable in the frequency spectrum as a starting point; if time allows we can allow for more complex and more similar sounds within the spectrum. We predict that microphone filtering will be quite difficult for a two-player situation, so initially our objective is to deploy our project as a one-player game and if time and complexity allows we can allow a second player.