## Twich Plays RC Robot: An Analysis and Comparison with Twitch Plays Pokèmon.

Abstract: Social experiments on crowd-controlled gaming have been done on video games which are without any physical obstructions/limitations. The best example is *Twich Plays Pokèmon* where players from all over the world played Pokèmon Red by inputting commands (A, B, up, down, left, right, start, select) on chat while watching the live stream. This project shows a detailed analysis of varying number of players (1,2, 4, 8) playing on physical wheeled robot controlled by a Raspberry Pi Server and its comparison with video game (Pokèmon Red). The infinite monkey theorem states that a monkey hitting keys at random on a typewriter keyboard for an infinite amount of time will almost surely type any given text, such as the complete works of William Shakespeare. This situation is quite like the theorem. The only and the most important difference is that instead of random hitting of keys, multiple intelligent entities are trying to solve a problem with a specific goal. This is an attempt to identify these differences or limitations in physical robot as opposed to an emulator on PC.



Figure 1: A screenshot from Twitch
Plays Pokemon

Figure 2: Physical RC Robot