Duel Reality

Abstract
Duel Reality is a digitally enabled sword-fighting game. It explores how we could create compelling exertion gameplay by intentionally hiding biofeedback from the players, but not their opponents. In our game the data coming from a heart rate sensor determines where the opponent should hit you. However, you do not see this information yourself, so you will have to observe your body to figure out what your body is doing. If players had perfect knowledge of this data, they could easily defend themselves. However, since a player has no direct feedback from the sensors, their defense is weakened by their imperfect knowledge. Rather than trying to reduce the disparity between a player’s physical state and their awareness of that state, we use our game as a platform to study ways to harness this disparity to create novel gameplay.

Author Keywords
Heart rate; biofeedback; exertion game; exertion interface; fencing

ACM Classification Keywords
H.5.2 [Information Interfaces and Presentation]: User Interfaces.