Exercise and Mixed Reality - Virtual Human

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Abstract—During the 21st century, exercise and health are two main things that play major role in a human life. There are many different types of people in the real world. Some of them are obese who are are willing to exercise to become fit. We can also see several people who are normal but want to be fit to maintain a healthy life. In the medical field we know that physiotherapy is where many exercises are taught to patients to restore movement and function when someone is affected by injury, illness or disability. People can become fit by doing different types of exercise which is proven scientifically. Whereas, some people will be shy to go to the gym, some will have financial issues, some cannot afford personal trainers. People who need physiotherapy treatment may not be able to afford the medical expenses. All these issues can be solved by creating a virtual human that can train you anywhere, anytime just by learning how to use a Mixed Reality device. In this paper, I am presenting a mixed reality system that translates physical demonstration of various exercise protocols into movements which can be done by a holographic human.