Motion-Capture

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What is it?

1. A motion capture is like a planning, recording and an integration of a data.
2. Motion capture is the recording of human body movement for analysis and playback. The information captured can be simple or complex if it's required. Motion capture for computer character animation involves the mapping of human motion onto the motion of a computer character.
3. The mapping can be direct, such as human arm motion controlling a character's arm motion, or indirect, such as human hand and finger patterns controlling a character's skin color or emotional state.
4. Motion capture transfers the movement of an actor to a digital character.
5. The Characters wear a lycra suit that is covered in reflective ping pong balls so that when it's played back on a screen it can be designed to another costume.

Example clip

Behind the scenes of the Avatar movie

It shows us how they create the 6ft blue

Animals.

History

The history of the motion capture is quite recent.

It started in the late 1070's which is now quickly becoming more demanding.

1980-1983:

The idea of mapping animation onto actors is almost as old as animated feature films: Disney's pioneering 1938 film *Snow White & The Seven Dwarfs* partly utilized a process called 'rotoscoping,' whereby artists drew over live-action film frames. This technique was later used in animated films.

Initially developed by bio-mechanical engineers for motion studies, by the mid 1990s, the technology was being used in video games It was only a matter of time before filmmakers got on the bandwagon and did something similar to their films too.
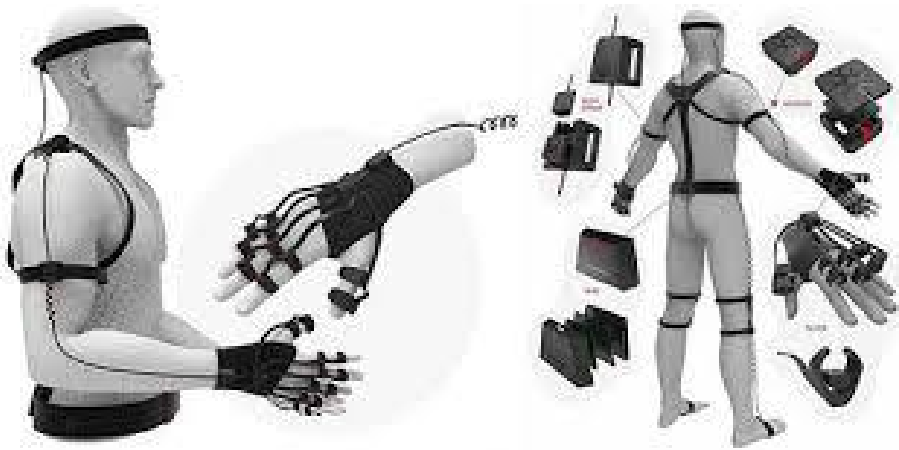
1995-2006:

The technology was first used to create a 'digital double' for Val Kilmer in 1995's *Batman Forever*. A digital double is where a picture is taken of a character and then copied and reapplied to make it look different as the character they are meant to be playing. Filmmaker James Cameron created crowd scenes in *Titanic* with performance-captured figures, replicated on a grand scale.

Resources needed to produce it

Resources needed are cameras,

Perception Neuron Motion Capture Suit

Production Method