

# Match to Performance Capturing

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- Match to Giant, Dwarf
- Match to Keyframe Animation
- Match to Voice Device
- Match to Future

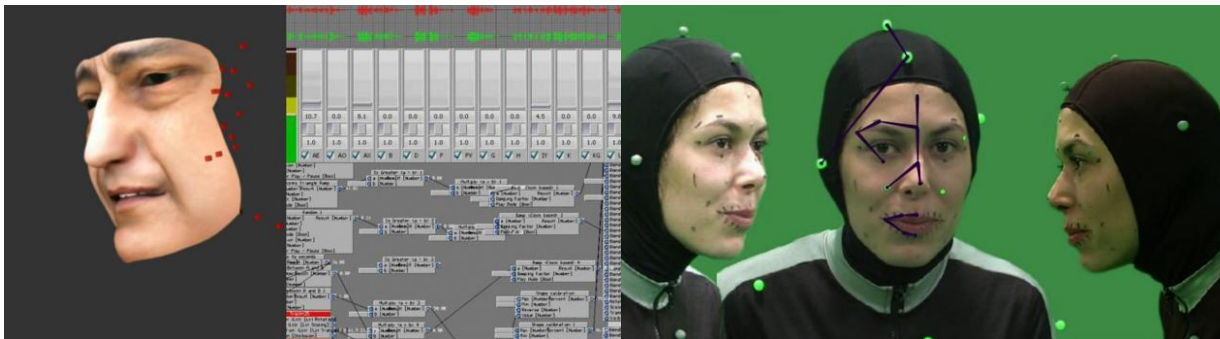
## Match<sup>1</sup> to Giant, Dwarf

Integrating performance capturing with motion control camera's obtainment independent of dimension. Facial also full body performance capturing datas can be used to adapt any size of cg models. In other words, you can shoot action camera when real actors and dummy with suit act their performance together at same time.



## Match<sup>1</sup> to Voice Device

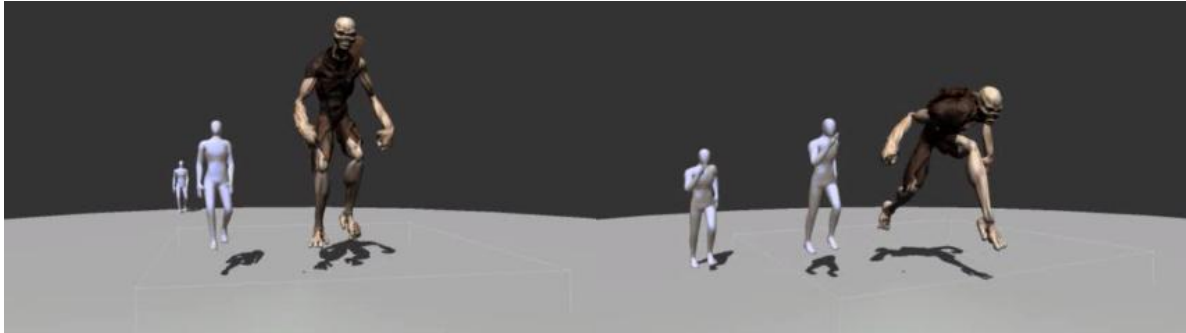
Performance datas where taken from facial markers reference only appeared expressions. However some syllabics are said inside of mouth. Kind of Motion Builder's Voice Devices can separate and sort WAV files as digitally. But by itself not enough to understand outside's status. In this manner, sorted syllabics with Voice Device can be leveled by video captured datas.



## Match<sup>1</sup> to Keyframe Animation

As you know from Character animators use video footages or their mates as references. When use performance capturing data for layouts will bring references to animator's working world.

Hardware Motion Capture Sets are expensive, exacting and faraway from working studios. On the other hand for p. capturing you need few Hdv cameras and few hours. Directors of acting or keyframe animators can performance by their self and adapt to their layouts.



## **Match<sup>1</sup> to Future**

### **Generating performance in computer**

Create personal alphabet

Syllabics, words, emphasis', expressions, emotions, behaviors, will archived to definition of personality. To use management of data base and statistical stochastic process will turn to intelligent datas.

It will provide to generate new behaviors. Fundamentally datas will come from dummy on other hands director will direct of datas. It can be said "Simone" feature film will alive.

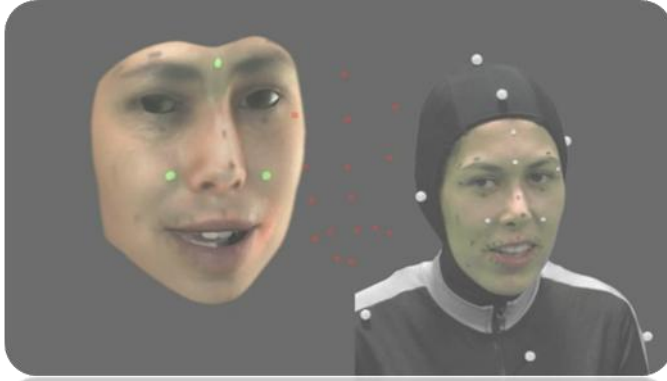
statistical stochastic process:

1. series of random events in which it is possible to evaluate the probability of their results.
2. a statistical process involving a number of random variables depending on a variable parameter.

## ***Reel Breakdown and Questionnaire***

3d tracks data integrated with MB Voice Device and Blend Shapes

3d tracks data integrated with Full Facial MoCap and Blend Shapes



3d tracks data integrated with Clusters

3d tracks data integrated with MoCap Actor and Control Rig

Programs: 3D Equalizer, Movimento, Maya, MotionBuilder

Scripts: MB relations, Maya Mel

Model: Generated in FaceGen Modeller

Render: Maya MentalRay

Tech: HDV Cameras

*1. Do any of these setups work in real time?*

For 3d tracking, i use 3dE, and you can't do real time in it, (in motion builder, you can use hardware capture device for real time, like vicon, on the other hand if u want exact datas from performances you have to believe software's power, the hardware's usable video game style performance)

*2. Can u say a few words on how u go about matching the point cloud data to a character that isn't at the same scale as the actor?*

For matching, it is the same method with object base tracking, just definition as none rigid body. for production preparation; minimum 2 cameras, known focal lengths, distance between dots. possible to scale the actor if camera is fixed, if the camera's in action you have to use motion control camera(I work on this example, would to share when ready, [blueman](#))

*3. At the site of 3D Equalizer there is a picture showing one possible method of retrieving 3d data using a single camera and a mirror, have u tested that technique? i only ask since i recall seeing a tutorial a while back on how to make your own polarized3d movie and the instructor built a setup using a single camera ,and a mirror so maybe it's similar(unfortunately i don't have that link anymore).*

if you have an independent point, you need minimum 2 cameras for calculating the space. for build virtual camera, all constant points give info for main, and single footage enough to work. Honestly can say getting track data is easy part, integrate to 3d model is complex part.

Fundamentally technique's same with at the site of 3DE. exclusively, there is no limit for analysis footages and relations. It is like to see The Matrix code in Live Action footages