

# Motion Capture from Body-mounted Cameras

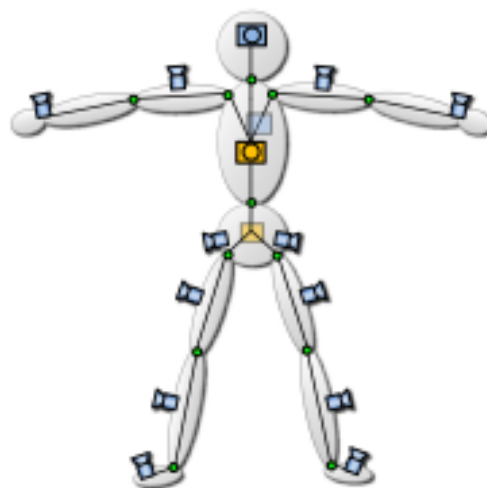
SIGGRAPH 2011



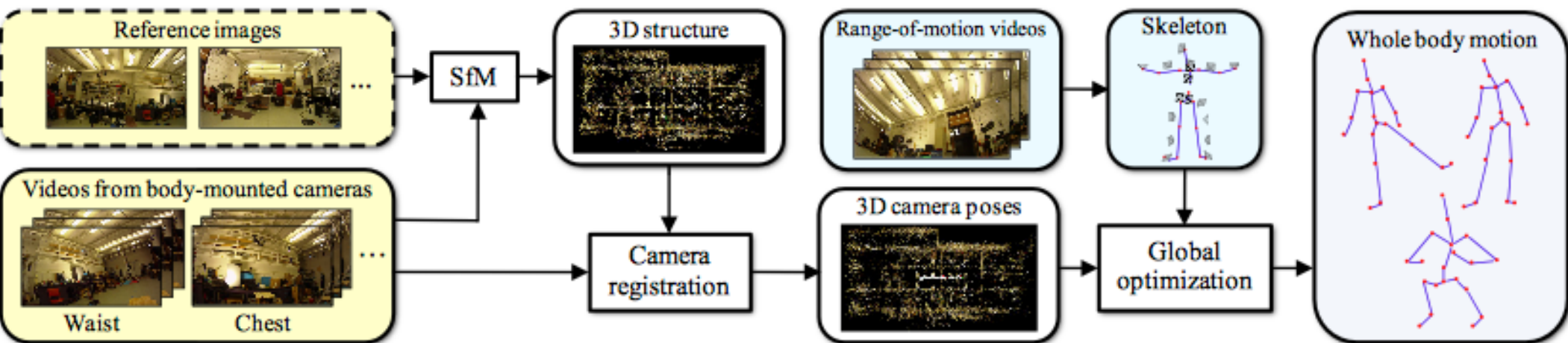
(a) Front



(b) Side



(c) Skeleton



# Motion Capture Perspectives

[“Understanding Motion Capture... by Alberto Menache]

“Eric Darnell, codirector of Antz, believes that the main problem with motion capture associated with characters has to do with mass distribution, weight, and exaggeration. He says that it is impossible for a performer to produce the kind of motion exaggeration that a cartoon character needs, and the mass and weight of the performer almost never looks good when applied to a character of different proportions.”

Benjamin Cheung (CG artist): “Motion capture is described as Satan’s Rotoscope because people are afraid to use it, and have used it in the past in an inappropriate way. The real problems of motion capture lie not in the capture itself, but in the planning and the capture support that animators need. The planning of the whole process is the most important part.”

Richard Chuang (PDI): “The mapping of human motion to a character with non-human proportions doesn’t work, because the most important things you get out motion capture are the weight shifts and the subtleties and that balancing act of the human body. If the proportions change, you throw all that out the door, so you might as well animate it.”

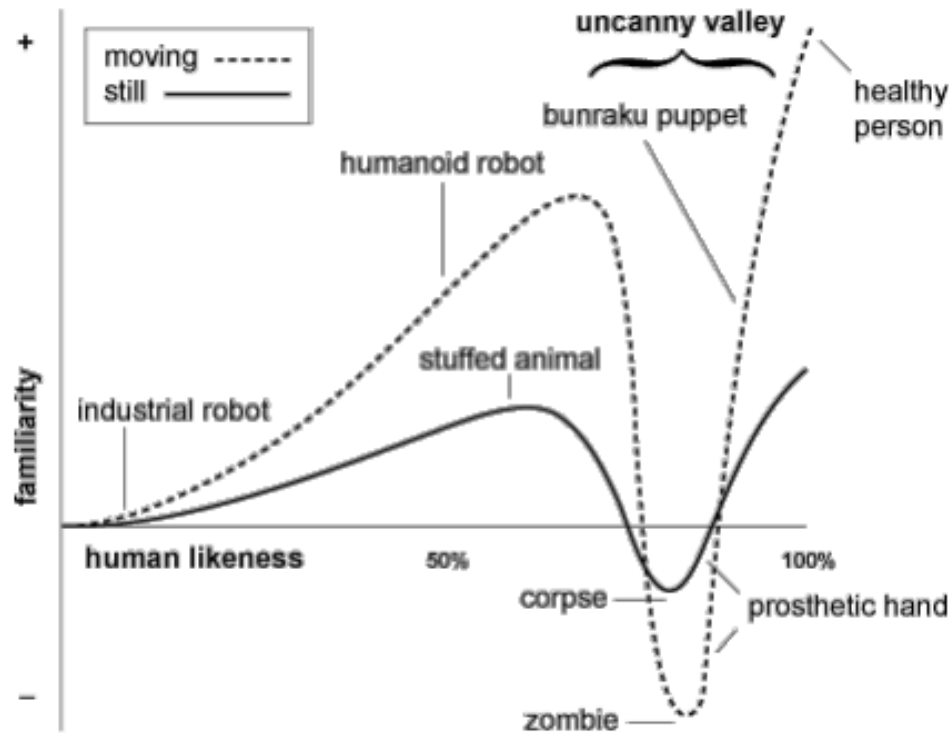
Tim Johnson: using motion capture as a reference is a fool's error... "To use performance animation as a reference just doesn't work. You can give me all the data in the world and it doesn't help me, as an artist, have a vision which leaps beyond the technical to seeing what's in the heart of a particular motion."

Benjamin Cheung: believes that it is better to use captured motion data as reference material.

Tim Johnson: ... biggest problem is that performance animation is used as though it were a substitute for animation. In his view, the principles of the craft of animation, whether it is done with clay, cutouts, drawings, or the computer, are the same: characterizing and exaggerating acting with nonhumans.

# Mori's "Uncanny Valley"

[Masahiro Mori, 1970]



Hiroshi Ishiguro – Gemonoid Robot  
Final Fantasy: The Spirits Within

Robots: Is the uncanny valley real?

<http://www.bbc.com/future/story/20130901-is-the-uncanny-valley-real>