

Master / Bachelor – project proposal

Reconciling mocap and traditional animation

With the advent of affordable consumer-range devices like the Kinect or the Leap Motion, one might fear that motion capture (mocap) will eventually make its way into every animator's workflow. Whatever you think about mocap, everybody agrees that it's a slog to work with: fixing such dense data in place is almost as bad as returning to the bad old days of animating one frame at a time. As a consequence, very few serious animators embrace mocap.

One needs to tame that mess.

We are looking for a candidate (HiWi, Bachelor, Master) who could implement a multi-channel keyframe reduction algorithm capable of cleaning-up mocap data. The algorithm should satisfy two constraints: firstly, it should considerably reduce the number of keyframes from the initial data, secondly, to facilitate a latter manual edit of the animation, it should, as much as possible, align the remaining keyframes on the same time references.

Requirements

The implementation will be done in Python and will be proposed as an extension to the open source Blender 3D editor (www.blender.org).

The candidate must have experience in algorithms development and object-oriented programming. Experience in constraint satisfaction problem is recommended. Knowledge in Computer Animation and Computer Graphics would be a plus.

More information available on <http://slsi.dfki.de>

