Skeletal Animation and Skinning - extra

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More animation

`pose.dmat` represents the vertice postions of several poses. I add one more pose (see `pose.dmat`) to make the Orge walk more naturally.

In function `animate`, remove `absf` to allow t to range from -1 to 1. And in function `setJointRotations`:

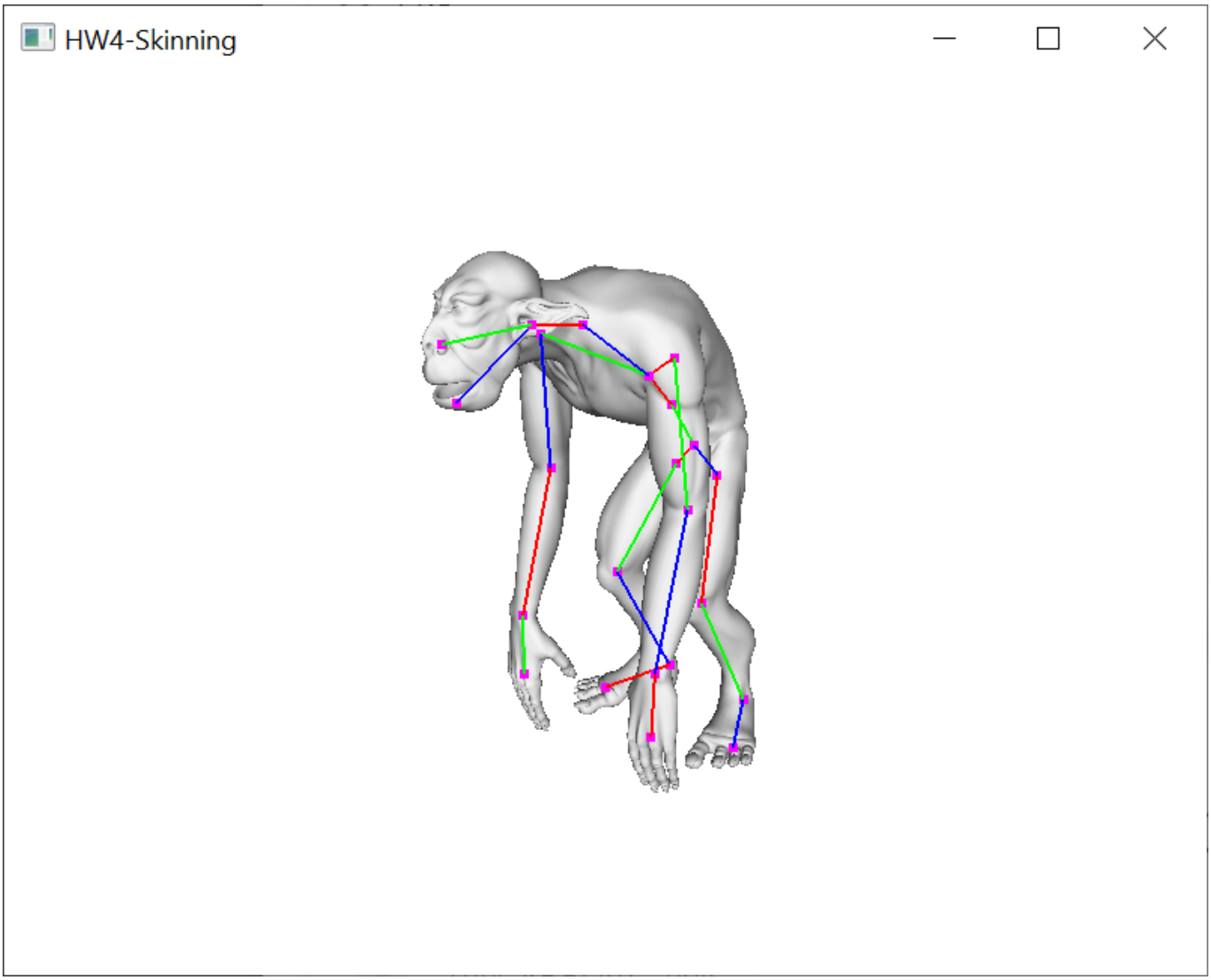
```
void setJointRotations(float t)
{
        int pose = 1;
        if (t < 0) {
                t = -t;
                pose = 2;
        }

        for (unsigned int jointID = 0; jointID < g_numJoints; ++jointID)
        {
                Quaternionf qB = Quaternionf(g_poses[pose][4 * jointID],
g_poses[pose][4 * jointID + 1], g_poses[pose][4 * jointID + 2], g_poses[pose][4 *
jointID + 3]);
                Quaternionf qA;
                qA.setIdentity();
                Quaternionf q = qA.slerp(t, qB);
                Matrix4f R;
                R.setIdentity();
                R.block<3, 3>(0, 0) = q.toRotationMatrix();
                g_jointRot[jointID] = R;
        }
}
```

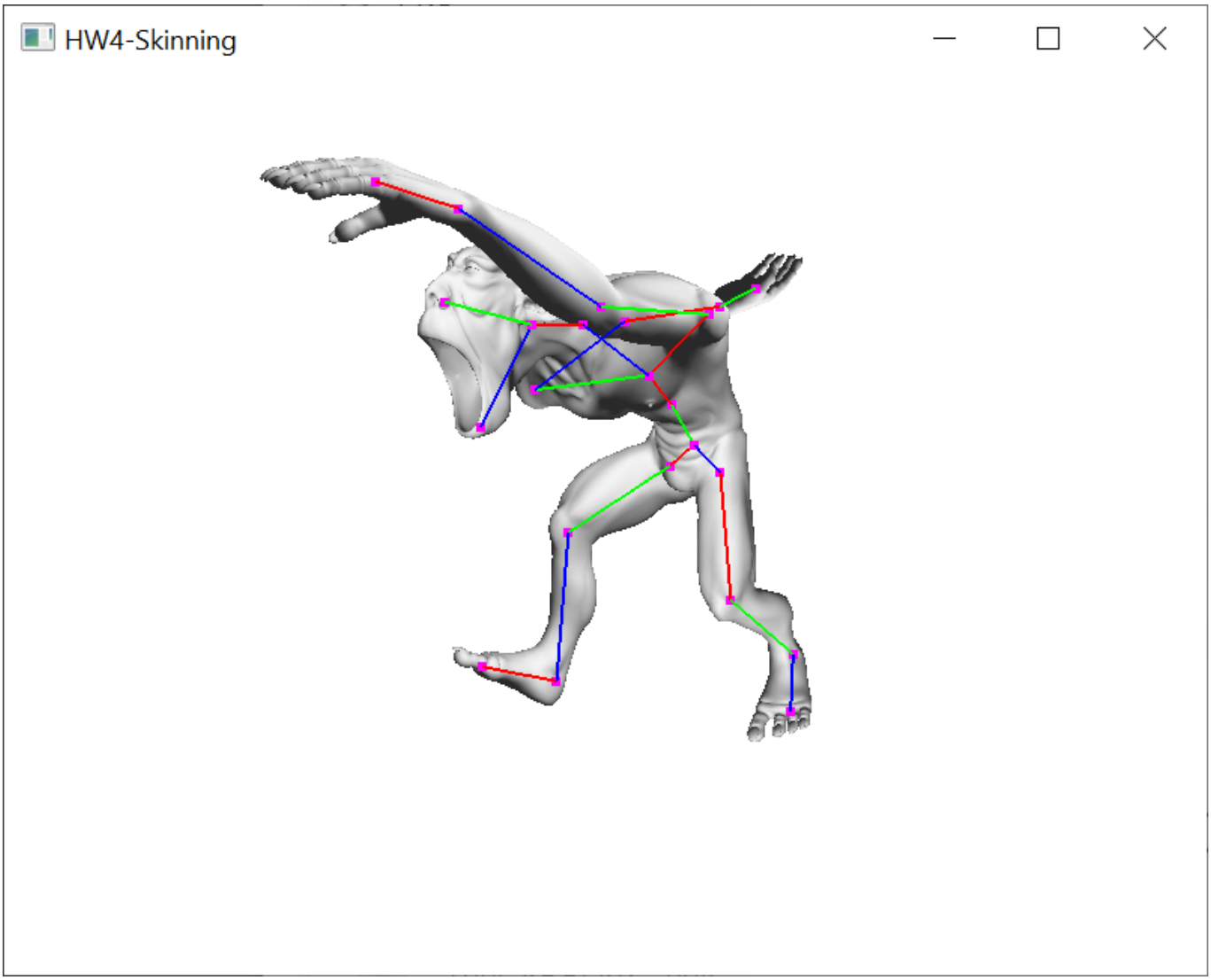
In this way, when the animation starts, the Orge would start from pose 0 and then pose 1. Then it goes back to pose 0 and continue towards the new pose 2, which is the reflection of pose 1. It looks like the Orge is actually walking.

Results

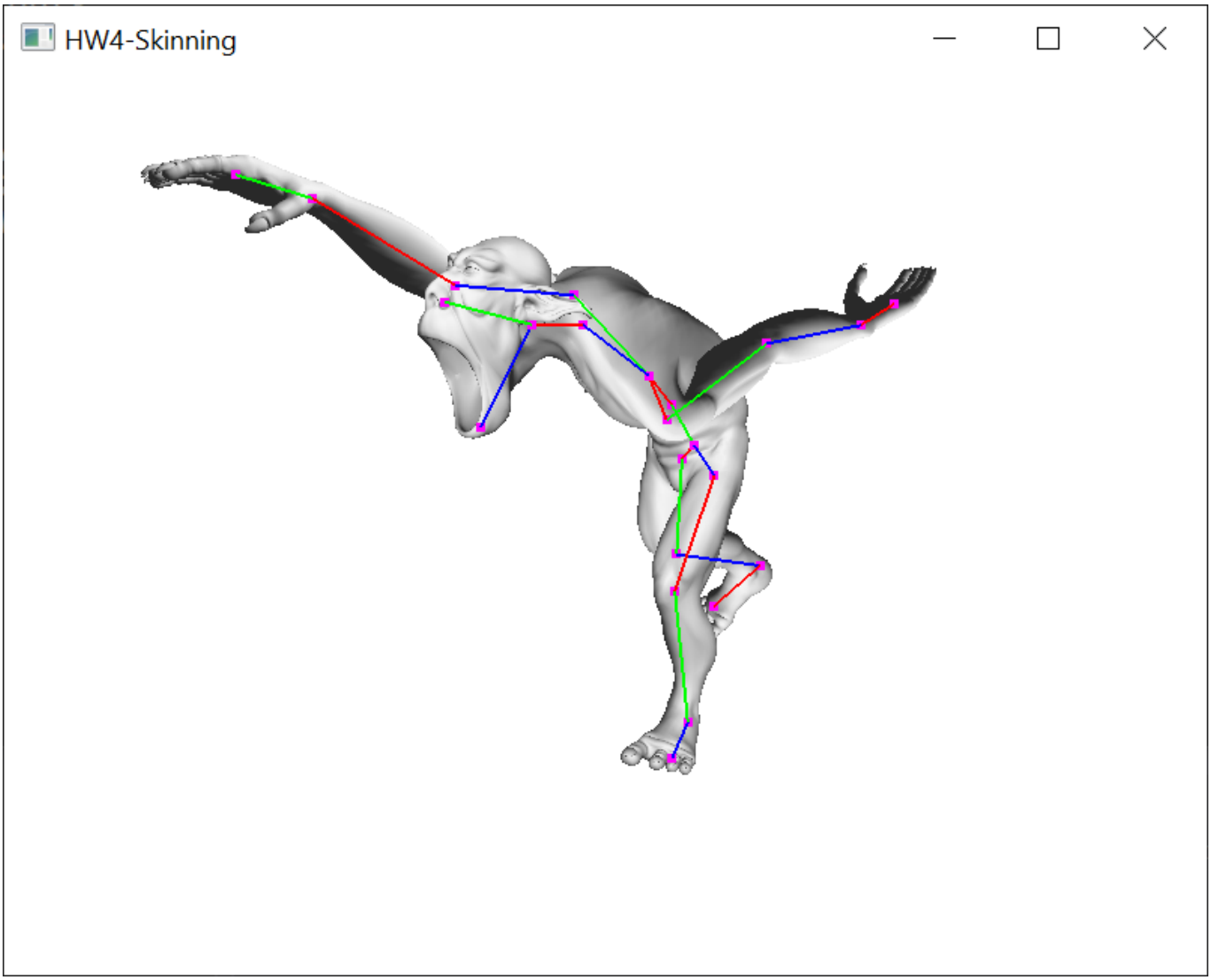
Pose0



Pose1



Pose2


HW4-Skinning