
algorithm 1 vertexfragment

InputData:

```

vertexInf={ position, UV, skinIndex }//Information about the current vertex
instanceObjInf={ //Information about the instantiated objects
    matrix,
    animationStyle,//The type and speed of animation
    textureStyle,//Types and tones of maps
}
uniformInf={ //Data shared by all instantiated objects
    skelontonDate,//Bone data
    time,//Time is used to calculate the current frame number
}

```

```

if bone(vertexInf.skinIndex)have animation then
    frameIndex = time * speed mod(frameIndexMax + 1);
    address0 = addressGet1(skinIndex,type,frameIndex);
else
    address0 = addressGet2(skinIndex,type);
end if
matrix1 ← skelontonDate at position address0;
matrix2 ← instanceObjInf.matrix;
glPosition = modelViewProjectionMatrix * matrix2 * matrix1 * position;
judgeArea(); //Determine which part of the body the current vertex is in

```

OutData:

```

glPosition //The current vertex corresponds to the position on the screen
sendFragmentShader={ //Information sent to fragmentshader
    areaType,//The area where the current point is located
    UV,    textureType,//Map type
    color,//For tone adjustment
}

```
