algorithm 1 Lightweight rendering of large crowd

InputData:

vertexInf={ $position$, UV, $skinIndex$ }
instanceObjInf={
    $matrix$,
    $animationStyle$,
    $textureStyle$,
}
uniformInf={
    $skelontonDate$,
    $time$,
}

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
$matrix1 \leftarrow skelontonDate\ at\ position\ address0$;
$matrix2 \leftarrow instanceObjInf.matrix$;
$glPosition = modelViewProjectionMatrix * matrix2 * matrix1 * position$;
$judgeArea()$;

OutData:

glPosition
sendFragmentShader={
    $areaType$,
    UV, $textureType$,
    $color$,
}