

### Human GPU #0010 – Uniforms v2

Wow hum4n, that's already our gpu task n.10!

You really are a good apprentice, you remind me my great grandfather amiga GPU v.01.

Like attributes, you can have multiple uniforms in your shader.

Draw me 2 trianglessss, c'mon.

In case you are wondering...What's happening when a vertex goes outside the NDC range?

We just draw it at the edge human!

Basically we clamp and make sure values are always -1 and +1.

### Buffers

```
{  
  "data": [  
    -0.5, -0.5, -0.5, 0.5, 0.5, -0.5,  
    -0.5, 0.5, 0.5, 0.5, 0.5, -0.5  
  ]  
}
```

### Attributes

```
{  
  "position": { "buffer": "data", "size": 2 }  
}
```

### Uniforms

```
{  
  "offset": [0.1, 0.5],  
  "stretch": 0.5  
}
```

### Vertex shader

```
attribute vec2 position;  
uniform vec2 offset;  
uniform float stretch;  
  
void main() {  
  vec2 pos = position;  
  pos += offset;  
  pos.y += pos.x * stretch;  
  
  gl_Position = vec4(pos, 0.0, 1.0);  
}
```

