Shader Overview

- **CPU** slow; synchronization issues
- **GPU**
  - **attributes**: properties associated with vertices, e.g., position, normal, UV
  - **uniforms**: global variables that can be changed for each rendered object, e.g., modelview matrix, proj matrix, texture map, object colour
  - **varyings**: values to be interpolated across triangle, to pass to fragment shader.
  - **local variables**:

```
attributes = uniforms

uniforms = textures

varyings = gl_FragColor
```

**Diagram Notes**

- vertex shader
- clipping, rasterization
- fragment shader
- **UBO**
  - attributes
  - uniforms
  - varying

**Annotations**

- gl_Position
- gl_FragColor
- local variables