![A picture containing animal

Description automatically generated]()

Year of the Rat

Project 1

Megan | CS557 | 1/15/20

# Images



Figure 1: Long Horizontal Ellipse



Figure 2: Long Vertical Ellipse

![A picture containing animal

Description automatically generated]()

Figure 3: Blurred Ellipse Edges

## Key Code

float Ar = uAd/2.;

float Br = uBd/2.;

int numins = int ( vST.s / uAd );

int numint = int ( vST.t / uBd );

float sc = numins \* uAd + Ar;

float tc = numint \*uBd + Br;

float ellipse = (pow(vST.s - sc,2)/pow(Ar,2))+(pow(vST.t - tc,2)/pow(Br,2));

float d = smoothstep( 1. - uTol, 1. + uTol, ellipse );

vec3 rgb = vLightIntensity \* mix( RED, YELLOW , d );

gl\_FragColor = vec4( rgb, 1. );

## Video Link

<https://media.oregonstate.edu/media/t/0_h95p2j2d>