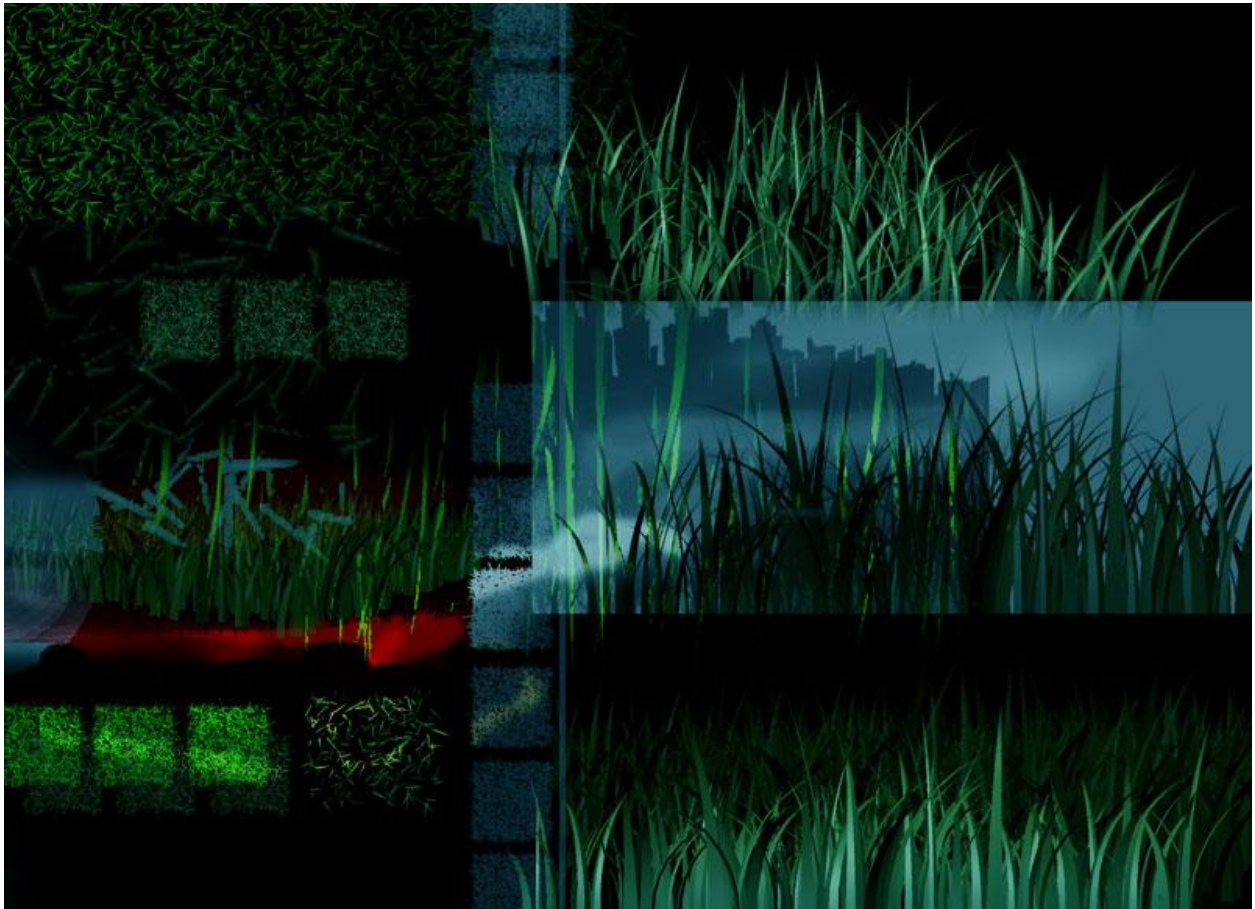


Maya Programming Lab 5 | Report

Daniel Loran

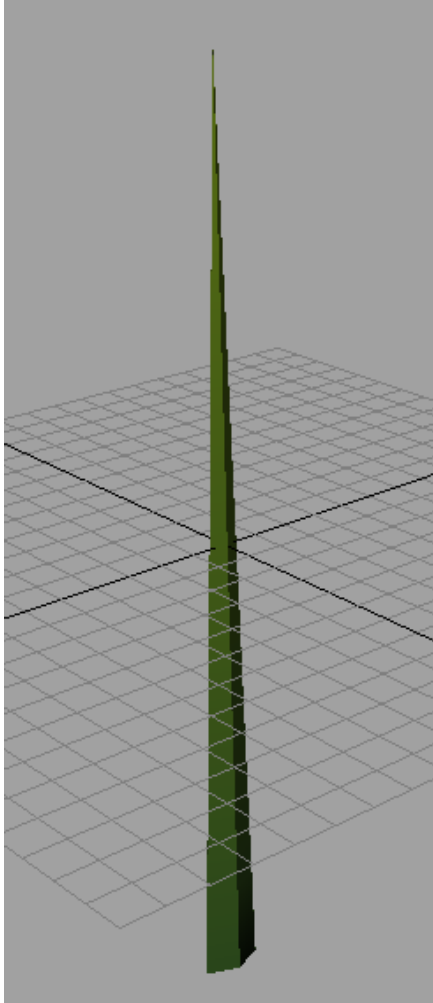
2007

Grass Generator



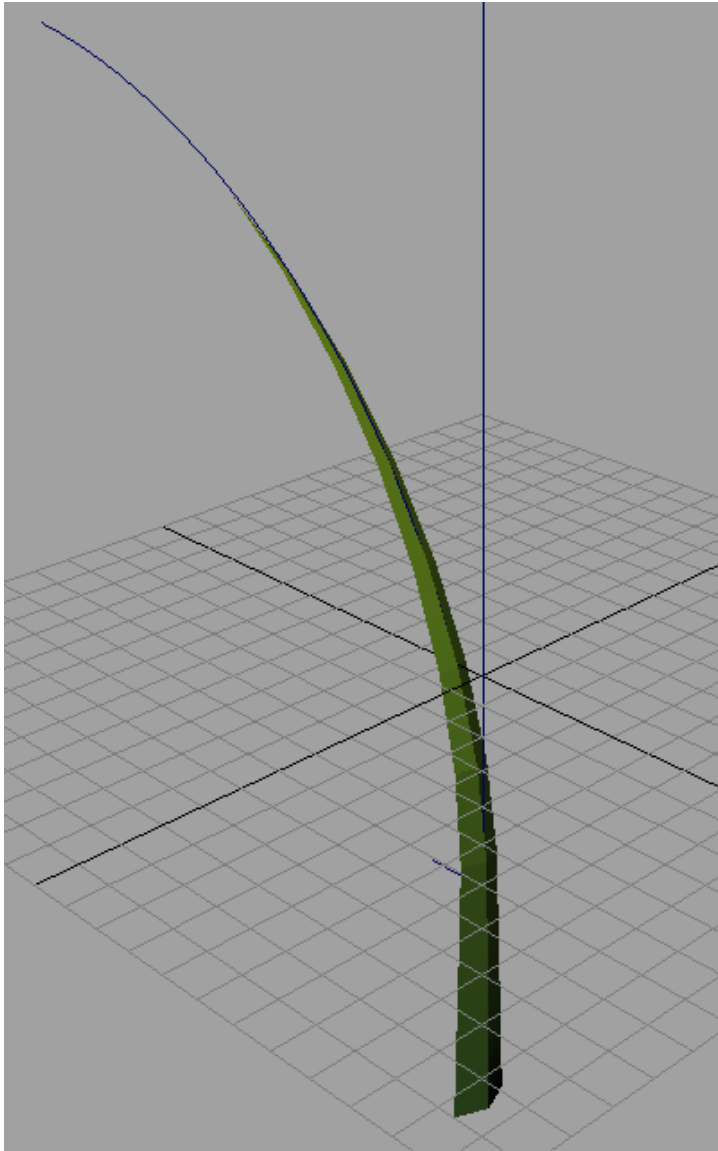
Experimenting with grass blade shape

To build the shape of a grass blade I did use a polygonal cone with 3 subdivisions on X and 10 subdivisions on Y. We need 10 subdivisions on Y to perform Bend deformation. Before applying Bend deformation we must harden the edges of the grass blade to obtain realistic shading.



Applying the Bend deformation

Bend deformation has to move to the base of the cone, this will allow us to generate variety of grass blades by changing the Curvature and Envelope Bend parameters.



Testing the Grass Generator

Here are the results with density = 100, and grass area: minX = -1, maxX = 1, minZ = -1, maxZ = 1:

```
generateGrass(100, -1.0, 1.0, -1.0, 1.0);
```

