

Homework 7: Image Processing

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The purpose of this assignment was to explore the image processing capabilities of opengl.

For my submission, I am drawing a textured monkey via ARRAY_BUFFERS and then applying two different edge detection algorithms depending on the shader.

```
Shader 0:
    Programmable pipeline only

Shader 1:
    Laplacian edge detection shader from ex11

Shader 2:
    My own edge detection algorithm
    Adapted from:
    - http://coding-experiments.blogspot.com/2010/06/edge-detection.html
```

To Build/Run

```
make all
./main
```

Controls

- Click Mouse and Drag to move
- +/- to zoom in and out
- 1 to switch from perspective/orthogonal projection
- m/n to switch between shader modes

Other Operations

Data for the array buffers was parsed externally via my own python parsing script.

```
python parseobj.py objfile.obj
```

Grepmake:

```
./grepmake runs 'make all' and greps the output for 'warning' or 'error'
```

Notes

Total time: 8 hours, put a lot into project structure, am trying to make my projects modular, to minimize work each subsequent week.