

# Computer Graphics Assignment #1

## Wireframe Viewer

### Line Drawing

Part 1 of the first assignment is to draw lines using Bresenham's algorithm. To test the algorithm's correctness, as a sanity check, one should draw lines in all directions. One way to do so is to draw lines from a point to many points on a circle centered around the point. Set the center point to be some  $(x_0, y_0)$  in the screen space. Then, in a loop, draw a line to  $(x_0 + r \sin \frac{2\pi i}{a}, y_0 + r \cos \frac{2\pi i}{a})$  for a certain choice of radius  $r$  and step size  $a$ .

For this part please create a folder named 'Assignment1Report', and inside it place a markdown file named 'Assignment1Report\_part1.md' (without the ') that will contain your report. In the report, you should display the following:

1. Your implementation of the algorithm.
2. A picture of the sanity check results
3. A drawing of your own choice. Try to be creative!