

Triangle tessellation algorithm approach 1

1. Randomly choose two lengths across the X and Y of the image border and connect the points if the area of the resulting right angle triangle is within the threshold.
2. Make_polygon() [turns two points/a line into a polygon and saves it to a data structure of some sort]
3. Randomly choose a point along the hypotenuse and push to stack
4. While stack is not empty OR a new triangle is able to be made
 - a. (Algorithm for finding the next point to connect to)
E.g: starting at a bearing of 180°, make a virtual line until it hits another line and if it creates a triangle with an area within the threshold, make a new point and line to that point. Else, decrement the bearing and try again.
 - b. Push the new point to the stack
 - c. Make_Polygon()
 - d. If no virtual lines can be created:
 - i. Pop the stack until one can
 - e. If the stack is empty:
 - i. Get the last point that was in the stack
 - ii. Travel along the line for a random distance
 - iii. If you don't come into contact with an existing point: push the new point to the stack