

# COT 4521-001: Introduction to Computational Geometry (Fall 2018)

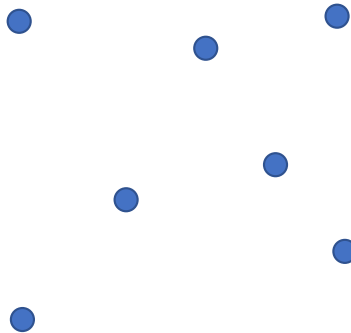
## Worksheet 5

### 1 Ground Rules

This assignment is intended to be done alone. You may ask others for high-level help. However, the answer must be yours.

### 2 Assignment

- For the following point set, find the Voronoi diagram using the insertion method. Show the algorithm using the following pages. Be sure to show all of the steps and the order of steps for the algorithm (i.e., all of the intersections).



- Use each steps to determine the best/average/worst case big-O performance for a single iteration.
- Combine that information to determine the best/average/worst case big-O for the entire computation.
- Using the final Voronoi diagram to determine the Delaunay Triangulation.
- Determine the best/average/worst case big-O for the Delaunay Triangulation computation.

### 3 Submission

Upload your answers and associated work to canvas as a single scanned, types, or photographed PDF document. Be sure that your submission is legible.

