COT 4521-001: Introduction to Computational Geometry (Fall 2019)

Worksheet 6

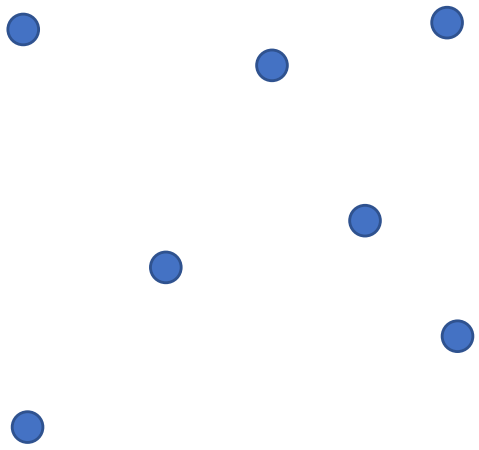
1 Ground Rules

This assignment is intended to be done alone. You may ask others for high-level help. However, the answer must be yours. For all questions we expect you to show yours work!

2 Assignment

- For the following point set, find the convex hull using:

  1. The QuickHull algorithm.
  2. The Graham's algorithm.



- Use the following page to show the steps of the algorithm. Print off as many copies as you need, though you may not need all copies of the point set.
- 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.

3 Submission

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