Computational Geometry (56:198:573/50:198:473) Spring 2018

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Course Details

- Syllabus
- All course material will be available at the Sakai site for this course (accessible only to those registered for the course).
- Homework Assignments
  - Homework Assignment #1
  - Homework Assignment #2
  - Homework Assignment #3
  - Homework Assignment #4
  - Homework Assignment #5

Course-related Links

- Two dimensional convex hulls: Animations of Graham's scan can be seen here (Princeton). This algorithm use angular sorted order (as proposed in Graham's algorithm), as opposed to the x-sorted order discussed in class.
- Line segment intersection: An animation of the line sweep algorithm can be seen here (Princeton).
- Art Gallery applet: One at McGill and one from Interactive Mathematics.
- Ear cutting: Tutorial by Ian Garton at McGill.
- Trapezoidal decomposition and polygon triangulation: A Java applet for the triangulation of a simple polygon can be seen here (University of Bonn, Germany). This applet illustrates the three-step process of trapezoidal decomposition, subdivision of the polygon into monotone pieces, followed by triangulation of the polygon.
- Voronoi diagrams: An animation of Fortune's line sweep algorithm for Voronoi diagrams can be

seen here.