Computational Geometry - Spring 2024

Suggested topics and papers for students to present

(you may choose some other relevant CG topic in consultations with me)

1. CG in Wireless Networks: Topologies
   http://www.cs.kent.edu/~dragan/CG/Survey1.pdf
   http://www.cs.kent.edu/~dragan/CG/Survey2.pdf
2. CG in Wireless Networks: Routing
   http://www.cs.kent.edu/~dragan/CG/Survey1.pdf
   http://www.cs.kent.edu/~dragan/CG/Survey2.pdf
3. Art Gallery Problem (a lot of sources, start search here
   http://en.wikipedia.org/wiki/Art_gallery_problem)
4. Condorcet and median points of simple rectilinear polygons
   http://www.cs.kent.edu/~dragan/Cond-Med.pdf
5. Visibility Graphs: an overview (de Berg, Mark; van Kreveld, Marc; Overmars, Mark; Schwarzkopf, Otfried (2000), "Chapter 15", *Computational Geometry* (2nd ed.), Springer-Verlag, pp. 307–317, ISBN 3-540-65620-0.)
6. Robot motion planning: an overview (de Berg, Mark; van Kreveld, Marc; Overmars, Mark; Schwarzkopf, Otfried (2000), "Chapter 13", *Computational Geometry* (2nd ed.), Springer-Verlag, pp. 307–317, ISBN 3-540-65620-0.)
7. Intersection graphs: interval, circular arc, circle, trapezoid, etc… and their applications (a lot of sources, start search here https://en.wikipedia.org/wiki/Intersection_graph)