**Computational Geometry - Spring 2025**

**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>

1. CG in Wireless Networks: Routing

<http://www.cs.kent.edu/~dragan/CG/Survey1.pdf>

<http://www.cs.kent.edu/~dragan/CG/Survey2.pdf>

1. Art Gallery Problem (a lot of sources, start search here <http://en.wikipedia.org/wiki/Art_gallery_problem> )
2. Condorcet and median points of simple rectilinear polygons

 <http://www.cs.kent.edu/~dragan/Cond-Med.pdf>

1. 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 .)
2. 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 .)
3. 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> )