

Topics for the exam
Computational Geometry (Geometriai Algoritmusok)
ELTE, 2024 fall, Balázs Keszegh

1. Convex hulls in the plane: lower bounds and algorithms
2. Segment intersection, overlay of two plane subdivisions
3. Art gallery problem, polygon triangulation
4. Point location problem
5. Casting, linear programming
6. Voronoi diagram
7. Computing the smallest disk and smallest-width annulus covering a point set
8. Computing the discrepancy, computing the subdivision induced by straight lines
9. Delaunay-triangulation: definitions, properties, application to terrain approximation
10. Computing a Delaunay-triangulation
11. Computing the convex hull in 3 dimensions