Schedules

Weekly Schedule

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	Monday	Tuesday	Wednesday	Thursday	Friday
9:30-11:00		lecture		lecture	
11:00-12:00	office hour (Matthew)	office hour (Yan-Bin)			
1:00-2:00			office hour (Yan-Bin)		
2:00-3:00					
3:00-4:00			office hour (Matthew)		
4:00-5:00					

Course Schedule

The following is a tentative schedule of the topics we will be discussing in class.

Date	Topics
Jan 14	Geometric Basics; 2D Convex Hulls
Jan 16	Line Segment Intersection
Jan 21	Doubly-Connected Edge List; Overlay of Two Planar Subdivisions
Jan 23	The Art Gallery Problem
Jan 28	Polygon Triangulation
Jan 30	Half-Plane Intersection
Feb 4	Incremental Linear Programming
Feb 6	Randomized Linear Programming
Feb 11	Orthogonal Range Searching
Feb 13	Kd-Trees
Feb 18	Range Trees
Feb 20	Point Location
Feb 25	Trapezoidal Maps
Feb 27	Voronoi Diagrams (VD)
Mar 3	**Midterm**
Mar 5	VD Construction by Line Sweeping
Mar 7	Farthest-Point Voronoi Diagrams

Mar 22	Rendering & Duality
Mar 24	Arrangement of Lines
Mar 26	Line Arrangement Computation
Mar 31	Triangulation of Point Sets
Apr 2	Delaunay Triangulation (DT)
Apr 7	Randomized Incremental Construction of DT
Apr 9	Convex Hulls in 3D
Apr 14	Convex Hulls & Half-Space Intersection
Apr 16	Robot Motion Planning
Apr 21	Minkowski Sums
Apr 23	Visibility Graphs
Apr 28	Interval Trees
Apr 30	Segment Trees
May ?	**Final**