Geometric Intersection

Detecting Intersection Between Convex Polygons

- Problem Specification

Junhui DENG

deng@tsinghua.edu.cn

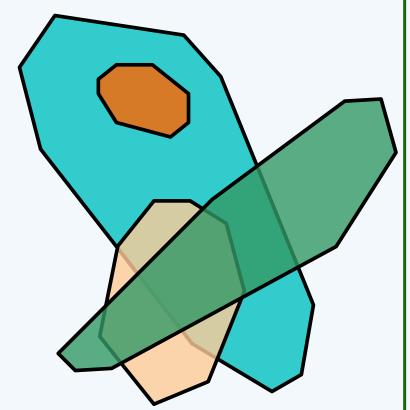
Body vs. Boundary

❖ CPID: Given two convex polygons in the plane, determine whether they intersect

❖ Here we're interested in the intersection of

polygonal bodies

instead of |boundaries|



❖ So when a polygon is strictly contained in the other,

the algorithm should still report an intersection

Detection vs. Construction

❖ Here we are concerned only with

intersection detection

instead of construction

❖ Next let's present

Dobkin and Kirkpatrick's algorithm (1983)

