# Straight Axis Grouping I

* When a split event occurs, we obtain a polygon – we can trace it back to a polygon (or a cycle) in the original tree.
  + At a split point where there is no vertex, we choose the closest vertex between the two on the side.
  + As vertices collide, we maintain an ordered list of vertices in the clockwise orientation.
  + [How can we order in the clockwise orientation?] When two vertices collide, we form a triangle with the collision point and two of the original points from which vertices started. Looking from the collision point, we can tell which order the two original points in the clockwise order.
* When a subsequent split event occurs on a polygon, we can trace it back to a portion of the polygon. From which, we can trace back to a polygon (or a cycle) in the original tree.

# Straight Axis Convex Grouping

* For each particle (dead or alive), assign the distance to the closest outward growing particle.
* For each particle, augment neighbors with its descendants and ancestors.
* A particle is a convex core, if its assigned distance is largest among its neighbors.
* Partition particles among convex cores.

# Previous schemes…

* Take a set of points and generate a triangulation graph.
* From the triangulation graph, calculate saliency.
  + Find *k* trebles with the *k* highest fitness values: *fix* at an edge x.
  + Assign the *k* trebles to an edge x by *six*=*fix*/*f0x*.
  + For each edge x, compute the support defined as
  + *Leftix*=max­j(*sjxsiy*)
  + take the product of supports from left and right.
* Carve the triangulation graph with saliency.
* Calculate the distance map.
* From the distance map, find a set of fixation points.
* Apply angular graph shortest path.

# Convexity measure

* Starting from an initial triangle, grows outward that best keeps the following measure high.

