

(Invited Talk) Location & Information

Maarten Löffler¹

¹ Utrecht University, the Netherlands
m.loeffler@uu.nl

Abstract

Let P be a set of n points in the plane. In the traditional geometric algorithms view, P is given as an unordered sequence of locations (usually pairs of x and y coordinates). There are many interesting and useful structures that one can build on top of P : the Delaunay triangulation, Voronoi diagram, well-separated pair decomposition, quadtree, etc. These structures can all be represented in $O(n)$ space but take $\Omega(n \log n)$ time to construct on a Real RAM, and, hence, contain information about P that is encoded in P but cannot be directly read from P .

Biography

Maarten Löffler is currently an assistant professor at Utrecht University. He has been a post-doc researcher at the Bren School of information and computer sciences of the University of California, Irvine. He was a PhD-student at Utrecht University.