

# Paper Review Course Project 600.488 Geometric Algorithms

Due: Monday, May 4, 1998

If you choose to do a paper review for your project, you should typeset the review in at least an 11pt font, preferably using the L<sup>A</sup>T<sub>E</sub>X document preparation system, and run at least 5, but no more than 10, pages. Note: your paper will be graded 50% on style and 50% on how well it incorporates the following components:

1. bibliographic info., i.e., title, author, journal, etc., for each paper included in the review.
2. a summary of the results of each paper.
3. an overview of the contributions, including
  - (a) significance of the problems studied (e.g., people who studied it before, applications, how it may be used),
  - (b) comparison with previous related work,
  - (c) identification of new techniques and approaches introduced,
  - (d) deficiencies, omissions, and weak parts.

The groups of potential papers for your review include the following:

1. randomized algorithms [15, 14, 20].
2. intersections and triangulations [8, 9, 11].
3. parametric searching [2, 10, 22].
4. Davenport-Shinzel sequences [1, 4, 16].
5. Kinetic data structures [5, 6, 7] (see also <http://graphics.stanford.edu/~guibas/g-kds.ps> and <http://graphics.stanford.edu/~guibas/access.html>).
6. Correctness certificates for geometric algorithms [26, 24] (please see also the Sullivan web site for certification, <http://www.cs.jhu.edu/~sullivan/download.html>).
7. Linear programming in fixed-dimensional spaces [3, 13, 17, 21, 23, 25].
8. Dynamic data geometric structures [12, 18, 19].

## References

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