

List of Publications

Mark H. Overmars

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Journal publications to appear

The following papers have been accepted for publication in journals but have not yet appeared.

- [1] J-S. Cheong, A.F. van der Stappen, K. Goldberg, M.H. Overmars, E. Rimon, Immobilizing hinged polygons, *Int. J. of Comp. Geom. and Appl.* 2006, to appear.
- [2] P. Agarwal, M.H. Overmars, M. Sharir, Computing maximally separated sets in the plane and independent sets in the intersection graph of unit disks, *SIAM J. Computing*, 2006, to appear.
- [3] M. de Berg, D. Halperin, M.H. Overmars, An intersection-sensitive algorithm for snap rounding, *Comput. Geom.: Theory and Applications*, 2006, to appear.
- [4] D. Nieuwenhuisen, A. Kamphuis, M. Mooijekind, M.H. Overmars, High quality navigation in computer games, *Science of Computer Programming*, 2006, to appear.
- [5] E. Demaine, J. Erickson, D. Krizanc, H. Meijer, P. Morin, M.H. Overmars, S. Whitesides, Realizing partitions respecting full and partial order information, *Journal of Discrete Algorithms*, 2006, to appear.

Refereed conference publications to appear

The following papers have been accepted for publication in refereed conference proceedings but have not yet appeared.

- [1] J. van den Berg, M.H. Overmars, Computing shortest paths amidst growing discs in the plane, *Proceedings EURO-CG-2006*, 2006, to appear.
- [2] D. Nieuwenhuisen, A.F. van der Stappen, M.H. Overmars, Pushing using compliance, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2006, to appear.
- [3] J. van den Berg, M.H. Overmars, Planning the shortest safe path amidst unpredictably moving obstacles, *Proceedings WAFR 2006*, 2006, to appear.
- [4] D. Nieuwenhuisen, A.F. van der Stappen, M.H. Overmars, Path planning among movable obstacles, *Proceedings WAFR 2006*, 2006, to appear.
- [5] J. van den Berg, M.H. Overmars, Path planning in repetitive environments, *Proceedings MMAR 2006*, 2006, to appear.
- [6] R. Geraerts, M.H. Overmars, Creating high-quality roadmaps for motion planning in virtual environments, *Proceedings IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'06)*, 2006, to appear.

Journal publications

- [1] R. Geraerts, M.H. Overmars, Sampling and node adding in probabilistic roadmap planners, *Robotics and Autonomous Systems Journal*, **54** (2006), pp. 165–173.
- [2] M. de Berg, J. Gudmundsson, M. Katz, C. Levkopoulos, M.H. Overmars, A.F. van der Stappen. TSP with neighborhoods of varying size, *J. Algorithms*, **57** (2005), pp. 22–36.
- [3] J. van den Berg, M.H. Overmars, Using workspace information as a guide to non-uniform sampling in probabilistic roadmap planners, *Int. J. Robotics Research* **24** (2005), pp. 1055–1071.
- [4] J. van den Berg, M.H. Overmars, Roadmap-based motion planning in dynamic environments, *IEEE Trans. on Robotics and Automation* **21** (2005), pp. 885–897.
- [5] E.D. Demaine, J.Erickson, F. Hurtado, J. Iacono, S. Langerman, H. Meijer, M.H. Overmars, S. Whitesides, Separating point sets in polygonal environments, *Int. J. of Comp. Geom. and Appl.* **15** (2005), pp. 403–419.
- [6] M.H. Overmars, Learning object-oriented design by creating games, *IEEE Potentials* **23(5)** (2004), pp. 11–13.
- [7] M. Soss, J. Ericksson, M.H. Overmars, Preprocessing chains for fast dihedral rotations is hard or even impossible, *Comput. Geom.: Theory and Applications* **26** (2003), pp. 235–246.
- [8] M. de Berg, H. David, M. Katz, M.H. Overmars, A.F. van der Stappen, J. Vleugels, Guarding scenes against invasive hypercubes, *Comput. Geom.: Theory and Applications* **26** (2003), pp. 99–117.
- [9] M.H. Overmars, Finding sets of points without empty convex 6-gons, *Discrete and Computational Geometry* **29** (2003), pp. 153–158.
- [10] M. de Berg, J. Gudmundsson, M. Hammar, M.H. Overmars, On R-trees with low query complexity, *Comput. Geometry: Theory and Applications* **24** (2003), pp. 179–195.
- [11] O. Aichholzer, C. Cortés, E. Demaine, V. Dujmovic, J. Erickson, H. Meijer, M. Overmars, B. Palop, S. Ramaswami, G. Toussaint, Flipping polygons, *Discrete and Computational Geometry* **28** (2002), pp. 231–254.
- [12] P. Agarwal, M. de Berg, S. Har-Peled, M.H. Overmars, M. Sharir, J. Vahrenholdt, Reporting intersecting pairs of convex polytopes in two and three dimensions, *Comput. Geom.: Theory and Applications* **23** (2002), pp. 195–207.
- [13] J. Chen, K. Goldberg, M.H. Overmars, D. Halperin, K. Bohringer, Y. Zhuang, Computing tolerance parameters for fixturing and feeding, *Assembly Automation* **22** (2002), pp. 163–172.
- [14] M. de Berg, M. Katz, M.H. Overmars, A.F. van der Stappen, J. Vleugels, Models and motion planning, *Comput. Geom.: Theory and Applications* **23** (2002), pp. 53–68.
- [15] R-P. Berretty, M.H. Overmars, A.F. van der Stappen, Orienting polyhedral parts by pushing, *Comput. Geom.: Theory and Applications* **21** (2002), pp. 21–38.
- [16] T. Biedl, E. Demaine, M. Demaine, S. Lazard, A. Lubiw, J. O’Rourke, M.H. Overmars, S. Robbins, I. Streinu, G. Toussaint, S. Whitesides, Locked and unlocked polygonal chains in 3D, *Discr. Comput. Geometry* **26** (2001), pp. 283–287.

- [17] O. Aichholzer, E. Demaine, J. Erickson, F. Hurtado, M. Overmars, M. Soss, G. Toussaint, Reconfiguring convex polygons, *Comput. Geom.: Theory and Applications* **20** (2001), pp. 85–95.
- [18] R.-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Trap design for vibratory bowl feeders, *Intern. Journal of Robotics Research* **20** (2001), pp. 891–908.
- [19] M.T. Zhang, K. Goldberg, G. Smith, R.-P. Berretty, M.H. Overmars, Pin design for part feeding, *Robotica* **19** (2001), pp. 695–702.
- [20] A.F. van der Stappen, K. Goldberg, and M.H. Overmars, Geometric eccentricity and the complexity of manipulation plans, *Algorithmica* **26** (2000), pp. 494–514.
- [21] A.F. van der Stappen, C. Wentink, M.H. Overmars, Computing immobilizing grasps of polygonal parts, *Intern. J. Robotics Research*, **19** (2000), pp. 467–479.
- [22] J. Vleugels, M.H. Overmars, Approximating Voronoi diagrams of convex sites in any dimension, *Int. J. of Comp. Geom. and Appl.* **8** (1998), pp. 201–221.
- [23] J. Tangelder, J. Vergeest, M.H. Overmars, Interference-free NC machining using spatial planning and Minkowski operations, *Computer-Aided Design* **30** (1998), pp. 277–286.
- [24] P. Švestka, M.H. Overmars, Coordinated path planning for multiple robots, *Robotics and Autonomous Systems* **23** (1998), pp. 125–152.
- [25] R.-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Computing fence designs for orienting parts, *Comput. Geom.: Theory and Applications* **10** (1998), pp. 249–262.
- [26] S. Sekhavat, P. Švestka, J.-P. Laumond, M.H. Overmars, Multilevel path planning for nonholonomic robots using semiholonomic subsystems, *Int. Journal of Robotics Research* **17** (1998), pp. 840–857.
- [27] M. de Berg, H. Meijer, M.H. Overmars, G. Wilfong, Computing the angularity tolerance, *Int. J. of Comp. Geom. and Appl.* **8** (1998), pp. 467–482.
- [28] D. Halperin, M.H. Overmars, Spheres, molecules, and hidden surface removal, *Comput. Geom.: Theory and Applications* **11** (1998), pp. 83–102.
- [29] A.F. van der Stappen, M.H. Overmars, M. de Berg, J. Vleugels, Motion planning in environments with low obstacle density, *Discr. Comput. Geometry* **20** (1998), pp. 561–587.
- [30] R.-P. Berretty, M.H. Overmars, A.F. van der Stappen, Dynamic motion planning in low obstacle density environments, *Comput. Geom.: Theory and Applications* **11** (1998), pp. 157–173.
- [31] M. de Berg, M. de Groot, M.H. Overmars, Perfect binary space partitions, *Comput. Geom.: Theory and Applications* **7** (1997), pp. 81–91.
- [32] P. Švestka, M.H. Overmars, Motion planning for car-like robots, a probabilistic learning approach, *Int. Journal of Robotics Research* **16** (1997), pp. 119–143.
- [33] P. Bose, L. Guibas, A. Lubiw, M.H. Overmars, D. Souvaine, J. Urrutia, The floodlight problem, *Int. J. of Comp. Geom. and Appl.* **7** (1997), pp. 153–163.
- [34] M.H. Overmars, N. Santoro, Improved bounds for electing a leader in a synchronous ring, *Algorithmica* **18** (1997), pp. 248–262.

- [35] M. de Berg, M. van Kreveld, R. van Oostrum, M.H. Overmars, Simple traversal of a subdivision without extra storage, *Intern. J. Geographical Information Science* **11** (1997), pp. 359–373.
- [36] M.T. de Berg, D. Halperin, M.H. Overmars, M.J. van Kreveld, Sparse arrangements and the number of views of polyhedral scenes, *Int. J. of Comp. Geom. and Appl.* **7** (1997), pp. 175–195.
- [37] B. Asberg, G. Blanco, P. Bose, J. Garcia-Lopez, M. Overmars, G. Toussaint, G. Wilfong, D. Zhu, Feasibility of design in stereolithography, *Algorithmica* **19** (1997), pp. 61–83.
- [38] M. de Berg, M. de Groot, M.H. Overmars, New results on binary space partitions in the plane, *Comput. Geom.: Theory and Applications* **8** (1997), pp. 317–333.
- [39] J. Vleugels, J. Kok, M.H. Overmars, Motion planning with complete knowledge using a colored SOM, *International Journal of Neural Systems* **8** (1997), pp. 613–628.
- [40] L. Guibas, M.H. Overmars, J.-M. Robert, The exact fitting problem in higher dimensions, *Comput. Geom.: Theory and Applications* **6** (1996), pp. 215–230.
- [41] L. Kavraki, P. Švestka, J-C. Latombe, M.H. Overmars, Probabilistic roadmaps for path planning in high-dimensional configuration spaces, *IEEE Trans. on Robotics and Automation* **12** (1996), pp. 566–580.
- [42] J.M. Vleugels, V. Ferrucci, M.H. Overmars, A. Rao, Hunting Voronoi vertices, *Comput. Geom.: Theory and Applications* **6** (1996), pp. 329–354.
- [43] M.H. Overmars, F. van der Stappen, Range searching and point location among fat objects, *J. of Algorithms* **21** (1996), pp. 626–656.
- [44] M.H. Overmars, Teaching computational geometry, *Computer Graphics* **29** (1995), pp. 18–22.
- [45] M. de Berg, L. Guibas, D. Halperin, M. Overmars, O. Schwarzkopf, M. Sharir, M. Teillaud, Reaching a goal with directional uncertainty, *Theoretical Computer Science* **140** (1995), pp. 301–317.
- [46] A. Gajentaan, M.H. Overmars, On a class of $O(n^2)$ problems in computational geometry, *Comput. Geom.: Theory and Applications* **5** (1995), pp. 165–185.
- [47] J. Adegest, M.H. Overmars, J. Snoeyink, Minimum link c -oriented paths: single source queries, *Int. J. of Comp. Geom. and Appl.* **4** (1994), pp. 39–51.
- [48] M. Sharir, M.H. Overmars, An improved technique for output-sensitive hidden surface removal, *Algorithmica* **11** (1994), pp. 469–484.
- [49] M.J. van Kreveld, M.H. Overmars, Concatenable structures for decomposable problems, *Inform. and Comput.* **110** (1994), pp. 130–148.
- [50] M.T. de Berg, M.H. Overmars, O. Schwarzkopf, Computing and verifying depth orders, *SIAM J. Computing* **23** (1994), pp. 437–446.
- [51] M.T. de Berg, D. Halperin, M.J. van Kreveld, M.H. Overmars, J. Snoeyink, Efficient ray shooting and hidden surface removal, *Algorithmica* **12** (1994), pp. 30–53.
- [52] J.A. La Poutré, J. van Leeuwen, M.H. Overmars, Maintenance of 2- and 3-edge-connected components of Graphs I, *Discr. Math.* **114** (1993), pp. 329–359.

- [53] M.J. van Kreveld, M.H. Overmars, Union-copy structures and dynamic segment trees, *J. ACM* **40** (1993), pp. 635–652.
- [54] P. Agarwal, M.J. van Kreveld, M.H. Overmars, Intersection queries in curved objects, *J. Algorithms* **15** (1993), pp. 229–266.
- [55] M.T. Goodrich, M.J. Atallah, M.H. Overmars, Output-sensitive methods for rectilinear hidden surface removal, *Inform. and Comput.* **107** (1993), pp. 1–24.
- [56] A.F. van der Stappen, D. Halperin, M.H. Overmars, The complexity of the free space for a robot moving amidst fat obstacles, *Comput. Geom.: Theory and Applications* **3** (1993), pp. 353–373.
- [57] D. Halperin, M.H. Overmars, M. Sharir, Efficient motion planning for an L-shaped object, *SIAM J. Computing* **21** (1992), pp. 1–23.
- [58] D. Eppstein, M.H. Overmars, G. Rote, G. Woeginger, Finding minimum area k -gons, *Discr. Comput. Geometry* **7** (1992), pp. 45–58.
- [59] M. Sharir, M.H. Overmars, A simple output-sensitive algorithm for hidden surface removal, *ACM Trans. on Graphics* **11** (1992), pp. 1–11.
- [60] M. de Berg, M.H. Overmars, Hidden surface removal for c -oriented polyhedra, *Comput. Geom.: Theory and Applications* **1** (1992), pp. 247–268.
- [61] M.J. van Kreveld, M.H. Overmars, P. Agarwal, Intersection queries in sets of disks, *BIT* **32** (1992), pp. 268–279.
- [62] M.T. de Berg, S. Carlsson, M.H. Overmars, A general approach to dominance in the plane, *J. Algorithms* **13** (1992), pp. 274–296.
- [63] M.T. de Berg, M.J. van Kreveld, B.J. Nilsson, M.H. Overmars, Shortest path queries in rectilinear worlds, *Int. J. of Comp. Geom. and Appl.* **2** (1992), pp. 287–309.
- [64] M.J. Katz, M.H. Overmars, M. Sharir, Efficient hidden surface removal for objects with small union size, *Comput. Geom.: Theory and Applications* **2** (1992), pp. 223–234.
- [65] M.H. Overmars, Point location in fat subdivisions, *Inform. Proc. Let.* **44** (1992), pp. 261–265.
- [66] M.H. Overmars, M. Sharir, Merging visibility maps, *Comput. Geom.: Theory and Applications* **1** (1991), pp. 35–49.
- [67] H. Schipper, M.H. Overmars, Dynamic partition trees, *BIT* **31** (1991), pp. 421–436.
- [68] M.J. van Kreveld, M.H. Overmars, Divided k -d trees, *Algorithmica* **6** (1991), pp. 840–858.
- [69] M.H. Overmars, C.K. Yap, New upper bounds for Klee’s measure problem, *SIAM J. Computing* **20** (1991), pp. 1034–1045.
- [70] M.H. Overmars, M. Smid, M.T. de Berg, M.J. van Kreveld, Maintaining range trees in secondary memory, Part I: Partitions, *Acta Informatica* **27** (1990), pp. 423–452.
- [71] M.H.M. Smid, M.H. Overmars, Maintaining range trees in secondary memory, Part II: Lower bounds, *Acta Informatica* **27** (1990), pp. 453–480.
- [72] M. de Berg, M.H. Overmars, M. van Kreveld, Finding complete bipartite subgraphs in bipartite graphs, *Algorithms Review* **1** (1990), pp. 79–85.

- [73] H. Edelsbrunner, M.H. Overmars, E. Welzl, I. B.-A. Hartman, J.A. Feldman, Ranking intervals under visibility constraints, *Intern. J. Computer Math.* **34** (1990), pp. 129–144.
- [74] M.H. Overmars, H. Schipper, M. Sharir, Storing line segments in partition trees, *BIT* **30** (1990), pp. 385–403.
- [75] D.P. Dobkin, H. Edelsbrunner, M.H. Overmars, Searching for empty convex polygons, *Algorithmica* **5** (1990), pp. 561–571.
- [76] P. Lentfert, M.H. Overmars, Data structures in a real-time environment, *Inform. Proc. Lett.* **31** (1989,) pp. 151–155.
- [77] H.W. Scholten, M.H. Overmars, General methods for adding range restrictions to decomposable searching problems, *J. Symbolic Computation* **7** (1989), pp. 1–10.
- [78] M.H.M. Smid, L. Torenvliet, P. van Emde Boas, M.H. Overmars, Two models for the reconstruction problem for dynamic data structures, *EIK J. of Inform Proc. and Cybernetics* **25** (1989), pp. 131–155.
- [79] M.H. Overmars, B. Scholten, I. Vincent, Sets without empty convex 6-gons, *Bull. of the EATCS* **37** (1989), pp. 160–168.
- [80] M.H.M. Smid, M.H. Overmars, L. Torenvliet, P. van Emde Boas, Maintaining multiple representations of dynamic data structures, *Information and Computation* **83** (1989), pp. 206–233.
- [81] M.H. Overmars, Efficient data structures for range searching on a grid, *J. Algorithms* **9** (1988), pp. 254–275.
- [82] R.G. Karlsson, M.H. Overmars, Scanline algorithms on a grid, *BIT* **28** (1988), pp. 227–241.
- [83] M.H. Overmars, D. Wood, On rectangular visibility, *J. Algorithms* **9** (1988), pp. 372–390.
- [84] C. Levcopoulos, M.H. Overmars, A balanced search tree with $O(1)$ worst-case update time, *Acta Informatica* **26** (1988), pp. 269–277.
- [85] R.G. Karlsson, M.H. Overmars, Normalized divide-and-conquer: A scaling technique for solving multi-dimensional problems, *Inform. Proc. Lett.* **26** (1987/88), pp. 307–312.
- [86] H. Edelsbrunner, M.H. Overmars, Zooming by repeated range detection, *Inform. Proc. Lett.* **24** (1987), pp. 413–417.
- [87] M.H. Overmars, E. Welzl, A simple method for solving 2-dimensional static range searching, *Bull. of the EATCS* **25** (1985), pp. 31–33.
- [88] H. Edelsbrunner, M.H. Overmars, Batched dynamic solutions to decomposable searching problems, *J. of Algorithms* **6** (1985), pp. 515–542.
- [89] H. Edelsbrunner, M.H. Overmars, R. Seidel, Some methods of computational geometry applied to computer graphics, *Computer Vision, Graphics and Image Processing* **28** (1984), pp. 92–108.
- [90] J. van Leeuwen, M.H. Overmars, Stratified balanced search trees, *Acta Informatica* **18** (1983), pp. 345–359.

- [91] H. Edelsbrunner, M.H. Overmars, On the equivalence of some rectangle problems, *Inform. Proc. Lett.* **14** (1982), pp. 124–127.
- [92] M.H. Overmars, J. van Leeuwen, Dynamic multidimensional data structures based on quad- and k-d trees, *Acta Informatica* **17** (1982), pp. 267–285.
- [93] M.H. Overmars, An $O(1)$ average update scheme for balanced search trees, *Bull. of the EATCS* **18** (1982), pp. 27–29.
- [94] M.H. Overmars, J. van Leeuwen, Two general methods for dynamizing decomposable searching problems, *Computing* **26** (1981), pp. 155–166.
- [95] M.H. Overmars, J. van Leeuwen, Some principles for dynamizing decomposable searching problems, *Inform. Proc. Lett.* **12** (1981), pp. 49–53.
- [96] K. Mehlhorn, M.H. Overmars, Optimal dynamization of decomposable searching problems, *Inform. Proc. Lett.* **12** (1981), pp. 93–98.
- [97] M.H. Overmars, General methods for "all elements" and "all pairs" problems, *Inform. Proc. Lett.* **12** (1981), pp. 99–102.
- [98] M.H. Overmars, Reporting and counting intersections of arcs on a circle, *Bull. of the EATCS* **14** (1981), pp. 7–15.
- [99] M.H. Overmars, J. van Leeuwen, Worst-case optimal insertion and deletion methods for decomposable searching problems, *Inform. Proc. Lett.* **12** (1981), pp. 168–173.
- [100] M.H. Overmars, Dynamization of order decomposable set problems, *J. of Algorithms* **2** (1981), pp. 245–260.
- [101] M.H. Overmars, J. van Leeuwen, Maintenance of configurations in the plane, *J. of Computers and System Sciences* **23** (1981), pp. 166–204.
- [102] M.H. Overmars, J. van Leeuwen, Further comments on Bycat's convex hull algorithm, *Inform. Proc. Lett.* **10** (1980), pp. 209–212.

Books

- [1] M. Merabti, N. Lee, M.H. Overmars, A. El Rhalibi (Eds.), *Proc. Third International Game Design and Technology Workshop and Conference (GDTW 2005)*, 2005.
- [2] M. Erdmann, D. Hsu, M.H. Overmars, A.F. van der Stappen (Eds.), *Algorithmic Foundations of Robotics VI*, Springer-Verlag, 2005.
- [3] M. de Berg, M. van Kreveld, M.H. Overmars, O. Schwarzkopf, *Computational Geometry, Algorithms and Applications, second edition*, Springer-Verlag, 2000.
- [4] M. de Berg, M. van Kreveld, M.H. Overmars, O. Schwarzkopf, *Computational Geometry, Algorithms and Applications*, Springer-Verlag, 1997.
- [5] J.-P. Laumond, M.H. Overmars (Eds.), *Algorithms for Robotic Motion and Manipulation*, A. K. Peters, Boston, 1997.
- [6] M.H. Overmars, *The design of dynamic data structures*, Lect. Notes in Comp. Science 156, Springer-Verlag, 1983.

Chapters in books

- [1] A.F. van der Stappen, R.-P. Berretty, K. Goldberg, M.H. Overmars, Geometry and part feeding, in G. Hager, H.I. Christensen, H. Bunke, R. Klein (Eds.), *Sensor based intelligent robots*, LNCS 2238, Springer-Verlag, 2002, pp. 259–281.
- [2] P. Švestka, M.H. Overmars, Probabilistic path planning, in: J.-P. Laumond (ed): *Robot Motion Planning and Control*, Lect. Notes in Control and Information Sciences 229, Springer-Verlag, 1998, pp. 255–304.
- [3] R.-P. Berretty, M.H. Overmars, A.F. van der Stappen, Algorithms for fence design, in P. Agarwal, L. Kavraki and M. Mason (ed.), *Robotics, the Algorithmic Perspective*, A. K. Peters, Boston, 1998, pp. 279–295.
- [4] J. Chen, K. Goldberg, M.H. Overmars, D. Halperin, K. Bohringer, Y. Zhuang, Shape tolerance in feeding and fixturing, in P. Agarwal, L. Kavraki and M. Mason (ed.), *Robotics, the Algorithmic Perspective*, A. K. Peters, Boston, 1998, pp. 297–311.
- [5] S. Sekhavat, P. Švestka, J.-P. Laumond, M.H. Overmars, Multi-level path planning for nonholonomic robots using semi-holonomic subsystems, in J.-P. Laumond and M. Overmars (ed.), *Algorithms for Robotic Motion and Manipulation*, A. K. Peters, Boston, 1997, pp. 79–96.
- [6] J. Tangelder, J. Vergeest, M.H. Overmars, Freeform shape machining using Minkowski operations, in J.-P. Laumond and M. Overmars (ed.), *Algorithms for Robotic Motion and Manipulation*, A. K. Peters, Boston, 1997, pp. 301–310.
- [7] C. Wentink, A.F. van der Stappen, M.H. Overmars, Algorithms for fixture design, in J.-P. Laumond and M. Overmars (ed.), *Algorithms for Robotic Motion and Manipulation*, A. K. Peters, Boston, 1997, pp. 321–346.
- [8] C. Wentink, A.F. van der Stappen, M.H. Overmars, Fixture design with edge-fixels, in R.C. Bolles, H. Bunke and H. Noltemeier (ed.), *Intelligent robots: sensing, modelling and planning*, World Scientific, Singapore, 1997, pp. 269–286.
- [9] M.H. Overmars, P. Švestka, A probabilistic learning approach to motion planning, *In: Algorithmic Foundations of Robotics*, A. K. Peters, Boston, 1995, pp. 19–37.
- [10] M.H. Overmars, Computational Geometry and its application to Computer Graphics, in: Purgathofer and Schönhut (ed.), *Advances in Computer Graphics V*, Springer-Verlag, 1989, pp. 75–107.
- [11] M.H. Overmars, Geometric data structures for computer graphics: an overview, in: R.A. Earnshaw (ed.), *Theoretical Foundations of Computer Graphics and CAD*, NATO ASI Series F Vol 40, Springer-Verlag, 1988, pp. 21–49.
- [12] M.H. Overmars, Computational geometry on a grid: an overview, in: R.A. Earnshaw (ed.), *Theoretical Foundations of Computer Graphics and CAD*, NATO ASI Series F Vol 40, Springer-Verlag, 1988, pp. 167–184.
- [13] M.H. Overmars, New algorithms for computer graphics, in: A.A.M. Kuijk, W. Strassen (ed.), *Advances in Computer Graphics Hardware II*, Springer-Verlag, 1988, pp. 3–19.
- [14] M.H. Overmars, Geometric data structures for computer graphics, in: R.A. Earnshaw (ed.), *Fundamental Algorithms for Computer Graphics*, NATO ASI Series F Vol 17, Springer-Verlag, 1985, pp. 919–931.

- [15] H. Edelsbrunner, M.H. Overmars, D. Wood, Graphics in Flatland: a case study, in: F.P. Preparata (ed.), *Advances in Computing Research, Vol 1: Computational geometry*, JAI Press, 1983, pp. 35–59.
- [16] M.H. Overmars, Dynamische zoekstructuren die hun geschiedenis onthouden, in: P.M.B. Vitanyi, J. van Leeuwen and P. van Emde Boas (ed.), *Colloquium complexiteit en algoritmen (deel 1)*, MC Syllabus 48.1, Mathematisch Centrum, Amsterdam, 1982, pp. 267–285.

Refereed conference publications

- [1] A. Kamphuis, M. Rook, M.H. Overmars, Tactical Path Finding in Urban Environments, *Proc. First International Workshop on Crowd Simulation (V-CROWDS05)*, 2005.
- [2] R. Geraerts, M.H. Overmars, Creating small roadmaps for solving motion planning problems, *Proc. 11th IEEE International Conference on Methods and Models in Automation and Robotics (MMAR 2005)*, 2005, pp. 531–536.
- [3] E. Demaine, J. Erickson, D. Krizanc, H. Meijer, P. Morin, M.H. Overmars, S. Whitesides, Realizing partitions respecting full and partial order information, In J. Ryan, P. Manyem, K. Sugeng, and M. Miller, editors, *Proceedings of the 16th Australasian Workshop on Combinatorial Algorithms (AWOCA)*, 2005, pp. 105–113.
- [4] M.H. Overmars, Path planning for games, *Proc. Third International Game Design and Technology Workshop and Conference (GDTW 2005)*, 2005, pp. 29–33.
- [5] A. Kamphuis, J. Pettre, M.H. Overmars, J.-P. Laumond, Path finding for the animation of walking characters, *Poster Proceedings ACM/Eurographics Symposium on Computer Animation*, 2005, pp. 8–9.
- [6] J. van den Berg, D. Nieuwenhuisen, L. Jaillet, M.H. Overmars, Creating robust roadmaps for motion planning in changing environments, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'05)*, 2005, pp. 2415–2421.
- [7] D. Nieuwenhuisen, A.F. van der Stappen, M.H. Overmars, Path planning for pushing a disk using compliance, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'05)*, 2005, pp. 4061–4067.
- [8] J. van den Berg, M.H. Overmars, Prioritized motion planning for multiple robots, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'05)*, 2005, pp. 2217–2222.
- [9] R. Geraerts, M.H. Overmars, On improving the clearance for robots in high-dimensional configuration spaces, *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS'05)*, 2005, pp. 4074–4079.
- [10] D. Nieuwenhuisen, A. Kamphuis, M. Mooijekind, M.H. Overmars, Automatic construction of roadmaps for path planning in games, *Proceedings ASCI 2005*, 2005, pp. 153–163.
- [11] R. Geraerts, M.H. Overmars, On the analysis and success of sampling based motion planning, *Proceedings ASCI 2005*, 2005, pp. 313–319.
- [12] R. Geraerts, M.H. Overmars, Reachability analysis of sampling based planners, *Proceedings of the IEEE International Conference on Robotics and Automation*, pp. 406–412, 2005.

- [13] P. Agarwal, M.H. Overmars, M. Sharir, Computing maximally separated sets in the plane and independent sets in the intersection graph of unit disks, *Proc. SODA 2004*, 2004, pp. 516–525.
- [14] R. Geraerts, M.H. Overmars, Sampling techniques for probabilistic roadmap planners, *Proc. 8th Conf. on Intelligent Autonomous Systems*, IOS Press, 2004, pp. 600-609.
- [15] D. Nieuwenhuisen, M.H. Overmars, Useful cycles in probabilistic roadmap graphs, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2004, pp. 446–452.
- [16] J. van den Berg, M.H. Overmars, Using workspace information as a guide to non-uniform sampling in probabilistic roadmap planners, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2004, pp. 453–460.
- [17] R. Geraerts, M.H. Overmars, Clearance based path optimization for motion planning, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2004, pp. 2386–2392.
- [18] A. Kamphuis, M.H. Overmars, Motion planning for coherent groups of entities, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2004, pp. 3815–3822.
- [19] D. Nieuwenhuisen, M.H. Overmars, Motion planning for camera movements, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2004, pp. 3870–3876.
- [20] J. van den Berg, M.H. Overmars, Using watershed segmentation in robot motion planning, *Proceedings ASCI 2004*, 2004, pp. 151–158.
- [21] R. Geraerts, M.H. Overmars, On improving the path quality for motion planning, *Proceedings ASCI 2004*, 2004, pp. 211-218.
- [22] D. Nieuwenhuisen, M.H. Overmars, Creating alternative routes in robot motion planning, *Proceedings ASCI 2004*, 2004, pp. 299–306.
- [23] A. Kamphuis, M.H. Overmars, Motion planning for coherent groups of entities, *Proceedings ASCI 2004*, 2004, pp. 327–334.
- [24] O. Goemans, M.H. Overmars, Automatic generation of camera motion to track a moving guide, *Proceedings WAFR 2004*, 2004, pp. 201–216.
- [25] E.D. Demaine, J. Erickson, F. Hurtado, J. Iacono, S. Langerman, H. Meijer, M.H. Overmars, S. Whitesides, Separating point sets in polygonal environments, *Proceedings ACM Symp. on Computation Geometry*, 2004, pp. 10–16.
- [26] A. Kamphuis, M.H. Overmars, Finding paths for coherent groups using clearance, *Proceedings ACM/Eurographics Symposium on Computer Animation*, 2004, pp. 19–28.
- [27] J. van den Berg, M.H. Overmars, Roadmap-based motion planning in dynamic environments, *Proceedings IEEE/RSJ Int. Conf. on Intelligent Robots and Systems - IROS'04*, 2004, pp. 1598–1605.
- [28] M.H. Overmars, Game design in education, *Proceedings CGAIDE 2004: 5th Game-On International Conference*, 2004, pp. 14–18.
- [29] D. Nieuwenhuisen, A. Kamphuis, M. Mooijekind, M.H. Overmars, Automatic construction of roadmaps for path planning in games, *Proceedings CGAIDE 2004: 5th Game-On International Conference*, 2004, pp. 285–292.

- [30] M.H. Overmars, Algorithms for motion and navigation in virtual environments and games, in J-D. Boissonnat, J. Burdick, K. Goldberg, S. Hutchinson (Eds.), *Algorithmic Foundations of Robotics V*, Springer-Verlag, 2003, pp. 1–5.
- [31] R. Geraerts, M.H. Overmars, A comparative study of probabilistic roadmap planners, in J-D. Boissonnat, J. Burdick, K. Goldberg, S. Hutchinson (Eds.), *Algorithmic Foundations of Robotics V*, Springer-Verlag, 2003, pp. 43–57.
- [32] M.H. Overmars, Recent developments in motion planning, P.Sloot, C. Kenneth Tan, J. Dongarra, A. Hoekstra (Eds.): *Computational Science – ICCS 2002, Part III*, Springer-Verlag, LNCS 2331, 2002, pp. 3–13.
- [33] J-S. Cheong, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Fixturing hinged polygons, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2002, pp. 876–881.
- [34] R-P. Berretty, M.H. Overmars, A.F. van der Stappen, Sensorless orientation of 3D polyhedral parts, *Proceedings of the IEEE International Conference on Robotics and Automation*, 2002, pp. 2016–2021.
- [35] M.H. Overmars, Motion planning in virtual environments, E. Deprettere, A. Belloum, J. Heijnsdijk, F. van der Stappen (Eds.): *proceedings ASCI 2002*, 2002, pp. 15–21.
- [36] G. Aloupis, P. Bose, E. Demaine, S. Langerman, H. Meijer, M.H. Overmars, G. Toussaint, Computing signed permutations of polygons, *Proceedings of the 14th Canadian Conference on Computational Geometry*, 2002, pp. 68–71.
- [37] G. Aloupis, E. Demaine, V. Dujmovic, J. Erickson, S. Langerman, H. Meijer, I. Streinu, J. O’Rourke, M.H. Overmars, M. Soss, G. Toussaint, Flat-state connectivity of linkages under dihedral motions, *Proceedings of the 13th Annual International Symposium on Algorithms and Computation*, 2002, pp. 369–380.
- [38] M. de Berg, J. Gudmundsson, M. Katz, C. Levcopoulos, M.H. Overmars, A.F. van der Stappen. TSP with neighborhoods of varying size, *Proceedings ESA 2002*, Springer-Verlag, LNCS 2461, 2002, pp. 187–199.
- [39] P. Agarwal, M. de Berg, S. Har-Peled, M.H. Overmars, M. Sharir, J. Vahrenholdt, Reporting intersecting pairs of polytopes in two and three dimensions, *Proc. WADS 2001*, Springer Lect. Notes in Computer Science 2125, Springer-Verlag, 2001, pp. 122–134.
- [40] R-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Orienting parts by inside-out pulling, *Proc. IEEE Intern. Conf. on Robotics and Automation*, 2001, pp. 1053–1059.
- [41] D. Sent, M.H. Overmars, Motion planning in an environment with dangerzones, *Proc. IEEE Intern. Conf. on Robotics and Automation*, 2001, pp. 1488–1493.
- [42] M. Hagedoorn, M.H. Overmars, R.C. Veltkamp, A robust affine invariant similarity measure based on visibility, *Proceedings EURO-CG-2000*, 2000, pp. 112–116.
- [43] R-P. Berretty, M.H. Overmars, A.F. van der Stappen, Orienting polyhedral parts by pushing, *Proceedings EURO-CG-2000*, 2000, pp. 136–139.
- [44] M. de Berg, J. Gudmundsson, M. Hammar, M.H. Overmars, On R-trees with low stabbing number, *Proceedings ESA 2000*, Springer Lect. Notes in Computer Science 1879, 2000, pp. 167–178.

- [45] T. Zhang, G. Smith, R-P. Berretty, M.H. Overmars, K. Goldberg, The toppling graph: designing pin sequences for part feeding, *Proceedings 2000 IEEE Intern. Conf. on Robotics and Automation*, 2000, pp. 139–146.
- [46] M. Hagedoorn, M.H. Overmars, R. Veltkamp, A New visibility partition for affine pattern matching, *Proc. Discrete Geometry for Computer Imagery conference, DGCI 2000*, Springer Lecture Notes in Computer Science 1953, Springer-Verlag, 2000, pp. 358–370.
- [47] O. Aichholzer, E. Demaine, J. Erickson, F. Hurtado, M. Overmars, M. Soss, G. Toussaint, Reconfiguring convex polygons, *Proceedings CCCG 2000*, 2000, pp. 17-20.
- [48] O. Aichholzer, C. Cortés, E. Demaine, V. Dujmovic, J. Erickson, H. Meijer, M. Overmars, B. Palop, S. Ramaswami, G. Toussaint, Flipturning polygons, *Proc. Japan Conference on Discrete and Computational Geometry 2000*, Tokay University, Tokyo, Japan, 2000.
- [49] T. Biedl, E. Demaine, M. Demaine, S. Lazard, A. Lubiw, J. O’Rourke, M.H. Overmars, S. Robbins, I. Streinu, G. Toussaint, S. Whitesides, Locked and unlocked polygonal chains in 3D, *Proceedings of the 10th Annual ACM-SIAM Symposium on Discrete Algorithms*, 1999, pp. 866-867.
- [50] R-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Geometric algorithms for trap design, *Proceedings 15th ACM Symp. on Computational Geometry*, 1999, pp. 95–104.
- [51] V. Boor, M.H. Overmars, A.F. van der Stappen, The Gaussian sampling strategy for probabilistic roadmap planners, *Proceedings 1999 IEEE Intern. Conf. on Robotics and Automation*, 1999, pp. 1018–1023.
- [52] C. Wentink, M.H. Overmars, A.F. van der Stappen, Computing form closure configurations, *Proceedings 1999 IEEE Intern. Conf. on Robotics and Automation*, 1999, pp. 1837–1842.
- [53] R-P. Berretty, K. Goldberg, L. Cheung, M.H. Overmars, G. Smith, A.F. van der Stappen, Trap design for vibratory bowl feeders, *Proceedings 1999 IEEE Intern. Conf. on Robotics and Automation*, 1999, pp. 2558–2563.
- [54] R-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, Geometric trap design for automatic part feeders, *Proceedings 1999 International Symp. on Robotics Research*, 1999, pp. 139–144.
- [55] J. Tangelder, J. Vergeest, H. van den Belt, M.H. Overmars, Producing physical prototypes using a sculpturing robot, *Proc TMCE’98*, 1998, pp. 254–259.
- [56] M. de Berg, M. Katz, M.H. Overmars, A.F. van der Stappen, J. Vleugels, Models and motion planning, *Proc. SWAT 98*, Springer-Verlag, Lect. Notes in Comp. Science 1432, 1998, pp. 83–94.
- [57] M.H. Overmars, Geometric algorithms for robotic manipulation, *Proc. ICALP’98*, Springer-Verlag, Lect. Notes in Comp. Science 1443, 1998, pp. 116–117.
- [58] T. Biedl, E. Demaine, M. Demaine, A. Lubiw, M.H. Overmars, J. O’Rourke, S. Robbins, S. Whitesides, Unfolding some classes of orthogonal polyhedra, *Proc. CCCG’98 (electronic)*, 1998.
- [59] M. de Berg, H. David, M. Katz, M.H. Overmars, A.F. van der Stappen, J. Vleugels, Guarding scenes against invasive hypercubes, *Proc. 2nd Workshop on Algorithm Engineering*, 1998, pp. 110–120.

- [60] R.-P. Berretty, K. Goldberg, M.H. Overmars, A.F. van der Stappen, On fence design and the complexity of push plans for orienting parts, *Proc. 13th ACM Symp. on Computational Geometry*, 1997, pp. 21–29.
- [61] R.-P. Berretty, M.H. Overmars, A.F. van der Stappen, Dynamic motion planning in low obstacle density environments, *Proc. WADS'97*, Lecture Notes in Comput. Sci. 1272, Springer-Verlag, 1997, pp. 3–16.
- [62] M. de Berg, M. van Kreveld, R. van Oostrum, M.H. Overmars, Simple traversal of a subdivision without extra storage, short communication, *Proc 12th ACM Symp. on Computational Geometry*, 1996, pp. C5–C6.
- [63] P. Švestka, M.H. Overmars, Multi-robot path planning with super-graphs, *Proc. Symposium on Robotics and Cybernetics*, 1996, pp. 482–487.
- [64] J. Tangelder, J. Vergeest, M.H. Overmars, Computation of voxel maps containing tool access directions for machining free-form shapes, *Proc. Design for Manufacturing Conference*, 1996.
- [65] M.H. Overmars, P. Švestka, The probabilistic path planner: A general approach to robot motion planning, *Proc. MMAR 96*, 1996, pp. 909–916.
- [66] M.H. Overmars, Designing the computational geometry algorithms library CGAL, in: M. Lin, D. Manocha (ed.), *Applied Computational Geometry*, Springer-Verlag, Lect. Notes in Comp. Science 1148, 1996, pp. 53–56.
- [67] M. de Berg, P. Bose, K. Dobrindt, M. van Kreveld, M.H. Overmars, M. de Groot, T. Roos, J. Snoeyink, S. Yu, The complexity of rivers in triangulated terrains, *Proc. 8th Canadian Conference on Computational Geometry*, 1996, pp. 325–330.
- [68] M. de Berg, H. Meijer, M.H. Overmars, G. Wilfong, Computing the angularity tolerance, *Proc. 8th Canadian Conference on Computational Geometry*, 1996, pp. 331–336.
- [69] M.H. Overmars, P. Švestka, Probabilistic approaches to motion planning, in: K. Jeffery, J. Král, M. Bartošek (ed.), *SOFSEM '96: Theory and Practice of Informatics*, Springer-Verlag, Lect. Notes in Comp. Science 1175, 1996, pp. 95–112.
- [70] M.H. Overmars, A. Rao, O. Schwarzkopf, C. Wentink, Immobilizing polygons against a wall, *Proc 11th ACM Symp. on Computational Geometry*, 1995, pp. 29–38.
- [71] B. van de Kraats, M. van Kreveld, M.H. Overmars, Printed circuit board simplification: Simplifying subdivisions in practice, short communication, *Proc 11th ACM Symp. on Computational Geometry*, 1995, pp. C30–31.
- [72] P. Švestka, M.H. Overmars, Coordinated motion planning for multiple car-like robots using probabilistic roadmaps, *Proc. IEEE Intern. Conf. on Robotics and Automation*, 1995, pp. 1631–1636.
- [73] A.J. Knobbe, J.N. Kok, M.H. Overmars Robot motion planning in unknown environments using neural networks, *Proc. ICANN'95*, Vol 2, 1995.
- [74] M. de Berg, M. van Kreveld, R. van Oostrum, M.H. Overmars, Simple traversal of a subdivision without extra storage, *Proc. 3rd ACM Intern. Workshop on Advances in Geographic Information Systems*, 1995, pp. 77–84.
- [75] F. van der Stappen, M.H. Overmars, Motion planning amidst fat obstacles, *Proc. 10th ACM Symp. on Computational Geometry*, 1994, pp. 31–40.

- [76] D. Halperin, M.H. Overmars, Spheres, molecules, and hidden surface removal, *Proc. 10th ACM Symp. on Computational Geometry*, 1994, 113-122.
- [77] M. de Berg, M. de Groot, M.H. Overmars, New results on binary space partitions in the plane, *Proc. SWAT 94*, Lect. Notes in Comp. Science 824, Springer-Verlag, 1994, pp. 61-72.
- [78] V. Ferrucci, M.H. Overmars, A. Rao, J.M. Vleugels, Hunting Voronoi vertices in non-polygonal domains, *Proc. 6th Canadian Conference on Computational Geometry*, 1994, pp. 45-50.
- [79] M.H. Overmars, F. van der Stappen, Range searching and point location among fat objects, *Proc. ESA '94*, Lect. Notes in Comp. Science 855, Springer-Verlag, 1994, pp. 240-253.
- [80] A.F. van der Stappen, D. Halperin, M.H. Overmars, Efficient algorithms for exact motion planning amidst fat obstacles, *Proc. IEEE Intern. Conf. on Robotics and Automation*, 1993, Vol. I, pp. 297-304.
- [81] M. de Berg, M.M. de Groot, M.H. Overmars, Perfect binary space partitions, *Proc. Fifth Canadian Conference on Computational Geometry*, 1993, pp. 109-114.
- [82] P. Bose, L. Guibas, A. Lubiw, M.H. Overmars, D. Souvaine, J. Urrutia, The floodlight problem, *Proc. Fifth Canadian Conference on Computational Geometry*, 1993, pp. 399-404.
- [83] J.M. Vleugels, J.N. Kok, M.H. Overmars, A self-organizing neural network for robot motion planning, *Proc. ICANN'93*, Springer-Verlag, 1993, pp 281-284.
- [84] M.H. Overmars, Teaching computational geometry, *Proc. EDU + COMPUGRAPHICS '93*, 1993, pp. 358-365.
- [85] M. de Berg, L. Guibas, D. Halperin, M. Overmars, O. Schwarzkopf, M. Sharir, M. Teillaud, Reaching a goal with directional uncertainty, *Proc. ISAAC'93*, 1993, pp. 1-10.
- [86] B. Asberg, G. Blanco, P. Bose, J. Garcia-Lopez, M. Overmars, G. Toussaint, G. Wilfong, D. Zhu, Feasibility of design in stereolithography, *Proc. FSTTCS'93*, Springer-Verlag, Lect. Notes in Comp. Science 761, 1993, pp. 228 - 237.
- [87] M.T. de Berg, M.H. Overmars, O. Schwarzkopf, Computing and verifying depth orders, *Proc. 8th ACM Symp. on Computational Geometry*, 1992, pp. 138-145.
- [88] H. Everett, W. Lenhart, M. Overmars, T. Shermer, J. Urrutia, Strictly convex quadrilateralizations of polygons, *Proc. Fourth Canadian Conference on Computational Geometry*, 1992, pp. 77-82.
- [89] M.T. de Berg, D. Halperin, M.H. Overmars, M.J. van Kreveld, Sparse arrangements and the number of views of polyhedral scenes, *Proc. CSN '92*, 1992, pp. 65-73.
- [90] M.T. de Berg, D. Halperin, M.J. van Kreveld, M.H. Overmars, J. Snoeyink, Efficient ray shooting and hidden surface removal, *Proc. 7th ACM Symp. on Computational Geometry*, 1991, pp. 21-30.
- [91] M.J. Katz, M.H. Overmars, M. Sharir, Efficient hidden surface removal for objects with small union size, *Proc. 7th ACM Symp. on Computational Geometry*, 1991, pp. 31-40.

- [92] P. Aggarwal, M.J. van Kreveld, M.H. Overmars, Intersection queries for curved objects *Proc. 7th ACM Symp. on Computational Geometry*, 1991, pp. 41–50.
- [93] A.F. van der Stappen, M.H. Overmars, On the complexity of the free space for motion planning problems (abstract), *Proc. IMACS '91*, 1991, pp. 140–141.
- [94] L. Guibas, M.H. Overmars, J.-M. Robert, The exact fitting problem for points, *Proc. Third Canadian Conference on Computational Geometry*, 1991, pp. 171–174.
- [95] M.H. Overmars, M. Sharir, Merging visibility maps, *Proc. 6th ACM Symp. on Computational Geometry*, 1990, pp. 168–176.
- [96] M. de Berg, M.J. van Kreveld, B.J. Nilsson, M.H. Overmars, Finding shortest paths in the presence of orthogonal obstacles using a combined L_1 and link metric, *Proc. SWAT'90*, Lect. Notes in Comp. Science 447, Springer-Verlag, 1990, pp. 213–224.
- [97] M.J. van Kreveld, M.H. Overmars, P. Agarwal, Intersection queries in sets of circles, *Proc. SWAT'90*, Lect. Notes in Comp. Science 447, Springer-Verlag, 1990, pp. 393–403.
- [98] H. Schipper, M.H. Overmars, Dynamic partition trees, *Proc. SWAT'90*, Lect. Notes in Comp. Science 447, Springer-Verlag, 1990, pp. 404–417.
- [99] M.T. Goodrich, M.J. Atallah, M.H. Overmars, An input-size/output-size trade-off in the time-complexity of rectilinear hidden surface removal, *Proc. ICALP'90*, Springer-Verlag, Lect. Notes in Comp. Science 443, 1990, pp. 689–702.
- [100] M. de Berg, M.H. Overmars, Hidden surface removal for axis-parallel polyhedra, *Proc. 31th IEEE Symp. on Foundations of Computer Science*, 1990, pp. 252–261.
- [101] M.J. van Kreveld, M.H. Overmars, Concatenable structures for decomposable problems, *Proc. CSN 90*, 1990, pp. 283–296.
- [102] M.T. de Berg, M.H. Overmars, Dominance in the presence of obstacles, *Proc. Workshop on Graph-theoretic Concepts in Computer Science (WG88)*, Lect. Notes in Comp. Science 344, Springer-Verlag, 1989, pp. 190–201.
- [103] M.H. Overmars, N. Santoro, Time vs Bits, *Proc. STACS 89*, Lect. Notes in Comp. Science 349, Springer-Verlag, 1989, pp. 282–293.
- [104] M.J. van Kreveld, M.H. Overmars, Concatenable segment trees (extended abstract), *Proc. STACS 89*, Lect. Notes in Comp. Science 349, Springer-Verlag, 1989, pp. 493–504.
- [105] D. Halperin, M.H. Overmars, Efficient motion planning for an L-shaped object (Extended Abstract), *Proc. 5th ACM Symp. on Computational Geometry*, 1989, pp. 156–166.
- [106] M.H.M. Smid, M.H. Overmars, L Torenvliet, P. van Emde Boas, Multiple representations of dynamic data structures, *Proc. 11th World Computer Congress (IFIP'89)*, 1989, pp. 437–442.
- [107] M.H. Overmars, M. Sharir, Output-sensitive hidden surface removal (extended abstract), *Proc. 30th IEEE Symp. on Foundations of Computer Science*, 1989, pp. 598–603.
- [108] M.H. Overmars, Applications of computational geometry, *Proc. CSN 89*, 1989, pp. 431–440.

- [109] M.H. Overmars, M.H.M. Smid, Maintaining range trees in secondary memory, in: R. Cori, M. Wirsing (eds.), *Proc. STACS 88*, Lect. Notes in Comp. Science 294, Springer-Verlag, 1988, pp. 38–51.
- [110] M.H. Overmars, E. Welzl, New methods for computing visibility graphs (extended abstract), *Proc. 4th ACM Symp. on Computational Geometry*, 1988, pp. 164–171.
- [111] D.P. Dobkin, H. Edelsbrunner, M.H. Overmars, Searching for empty convex polygons, *Proc. 4th ACM Symp. on Computational Geometry*, 1988, pp. 224–228.
- [112] M.H. Overmars, Connectivity problems, in: R. Karlsson, A. Lingas (eds), *Proc SWAT 88*, Lect. Notes in Comp. Science 318, Springer-Verlag, 1988, pp. 105–112.
- [113] L. Guibas, M.H. Overmars, M. Sharir, Intersecting line segments, ray shooting, and other applications of geometric partitioning techniques, in: R. Karlsson, A. Lingas (ed.), *SWAT 88*, Lect. Notes in Comp. Science 318, Springer-Verlag, 1988, pp. 64–73.
- [114] M.H. Overmars, C.K. Yap, New upper bounds for Klee’s measure problem (extended abstract), *Proc. 29th IEEE Symp. on Foundations of Computer Science*, 1988, pp. 550–557.
- [115] M.H.M. Smid, M.H. Overmars, L. Torenvliet, P. van Emde Boas, Maintaining multiple representations of dynamic data structures, *Proc. CSN 88*, 1988, pp. 315–333.
- [116] J.I. Munro, M.H. Overmars, D. Wood, Variations on Visibility, *Proc. 3rd ACM Symp. on Computational Geometry*, Waterloo, 1987, pp. 291–299.
- [117] M.H. Overmars, E. Welzl, Basic techniques in computational geometry, *Proc. SOFSEM 87*, Malenovice, Tszechoslovakia, 1987, pp. 189–214.
- [118] M.H. Overmars, Range searching in a set of line segments, *Proc. 1st ACM Symp. on Computational Geometry*, Baltimore, 1985, pp. 177–185.
- [119] M.H. Overmars, E. Welzl, The complexity of cutting paper, *Proc. 1st ACM Symp. on Computational Geometry*, Baltimore, 1985, pp. 316–321.
- [120] H.P. Kriegel, R. Mannss, M.H. Overmars, The inverted file tree machine: efficient multi-key retrieval for VLSI, *Proc. International Conference on Foundations of Data Organisation*, Kyoto, 1985, pp. 218–225.
- [121] M.H. Overmars, Range searching on a grid, in: H. Noltemeier (ed.), *Proc. 9th Conference on Graphtheoretic Concepts in Computer Science (WG85)*, Trauner Verlag, 1985, pp. 295–305.
- [122] M.H. Overmars, The locus approach, in: M. Nagl and J. Perl (ed.), *Proc. 9th Conference on Graphtheoretic Concepts in Computer Science (WG83)*, Trauner Verlag, 1983, pp. 263–273.
- [123] M.H. Overmars, Transforming semi-dynamic data structures into dynamic structures, in: J.R. Muehlbacher (ed.), *Proc. 7th Conference on Graphtheoretic Concepts in Computer Science (WG81)*, Carl Hanser Verlag, 1982, pp. 173–182.
- [124] M.H. Overmars, Lowerbounds and upperbounds on VLSI-layouts for perfect binary trees, in: H.J. Schneider and H. Göttler (ed.), *Proc. 8th Conference on Graphtheoretic Concepts in Computer Science (WG82)*, Carl Hanser Verlag, 1982, pp. 225–232.
- [125] M.H. Overmars, J. van Leeuwen, Dynamization of decomposable searching problems yielding good worst-case bounds, in: P. Deussen (ed.), *Theoretical Computer Science (5th GI-Conf.)*, Lect. Notes in Comp. Science 104, Springer-Verlag, 1981, pp. 224–233.

- [126] J. van Leeuwen, M.H. Overmars, The art of dynamizing, in: J. Gruska and M. Chytil (ed.), *Mathematical Foundations of Computer Science (Proc. 10th Symposium)*, Lect. Notes in Comp. Science 118, Springer-Verlag, 1981, pp. 121–131.
- [127] M.H. Overmars, J. van Leeuwen, Dynamically maintaining configurations in the plane, *Proc. 1980 ACM Symp. on Theory of Computing*, Los Angeles, 1980, pp. 135–145.

Vak publicaties

- [1] M.H. Overmars, Game research at Utrecht University, *BNVKI Newsletter* **22** (2005), pp. 105–106.
- [2] M.H. Overmars, Leven van de handel in virtuele zwaarden, *Automatiserings Gids* **47** (2005), pp. 13.
- [3] M.H. Overmars, Gesimuleerde karakters grootste opgave, *Automatiserings Gids* **46** (2005), pp. 15.
- [4] M.H. Overmars, Computergame meer dan alleen een spelletje, *Automatiserings Gids* **45** (2005), pp. 15.
- [5] M.H. Overmars, Teaching computer science through game design, *IEEE Computer* **37** (4) (2004), pp. 81–83.
- [6] M.H. Overmars, Motion planning in virtual environments and games, *ERCIM News* **57** (2004), pp. 33–34.
- [7] M.H. Overmars, It's all in the game, *Tinfony* **10** (2001), pp. 74–78.
- [8] M.H. Overmars, Robots in het informatica onderwijs, *Tinfony* **8** (1999), pp. 138–143.
- [9] M.H. Overmars, Een toekomst zonder technische informatica? *Informatie* **38** (1996), pp. 15–16.