Anil Maheshwari
School of Computer Science
Carleton University
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Ottawa, ON K1S 5B6, Canada
anil@scs.carleton.ca

Education

Ph.D. in Computer Science (1993)
Tata Institute of Fundamental Research
Mumbai (formerly Bombay), India.

Dual degrees in
M.Sc. (Hons.) Mathematics and
B.E. (Hons.) Electrical and Electronics Engineering (1987)
Birla Institute of Technology and Sciences, Pilani, India.

Work Experience

Professor	2006-	Carleton University
Associate Professor	2001-2006	Carleton University
Assistant Professor	1996-2001	Carleton University
Postdoctoral Fellow	1994-1996	Carleton University
Postdoctoral Fellow	1993-1994	Max-Planck Institute für Informatik
Visiting Fellow	1993-1996	Tata Institute of Fundamental Research
Research Scholar	1987-1993	Tata Institute of Fundamental Research

Adjunct Professor at Birla Institute of Technology and Sciences, Pilani (India) since 2007.

Research Interests include design and analysis of algorithms for problems in computational geometry, graphs, and discrete mathematics.

Research Grants

Source	Amount ($)	Duration	Type
NSERC	180,000	2016-20	Discovery Grant
Carleton	20,000	2014	Carty - India Scholar Visit
Carleton	3,000	2013	General Research
Carleton	2,000	2012	General Research
DFAIT	70,000	2010-13	Commonwealth Scholarship for students
NSERC	145,000	2011-15	Discovery Grant
MITACS	7,500	2011	MITACS Globalink Scholarship
NSERC	140,000	2006-10	Discovery Grant
Carleton	600	2009	Academic Development Fund
NSERC	133,135	2001-05	Discovery Grant
GEOIDE	300,000	1999-01	NCE

NSERC	75,900	1998-00	Operating
NSERC	23,000	1997-98	Operating
Carleton	3,200	1996	GR-5

Teaching

Course #	Title	Term/Year
COMP 1002	Systems Programming	W99, F97
COMP 1805	Discrete Structures I	W04, W99
COMP 2804	Discrete Structures II	W16
COMP 2805	Theory of Computation	F05, W05
COMP 3000	Operating Systems	F99, F98, W98
COMP 3801	Algorithms for Modern Data Sets	F16
COMP 3804	Data Str. & Algorithms	F06-08, W09, F09, W10, F10-11
COMP 4009	Parallel Algorithms	F98-00, F04-07
COMP 4109	Applied Cryptography	W11-12
COMP 4804	Advanced Algorithms	F00, W14-15
COMP 5008	Computational Geometry	W99, F97, W97
COMP 5703	Advanced Algorithms	F00, F04-11, F13-16
COMP 5704	Parallel Algorithms	W99

Supervision of Highly Qualified Personnel

	Duration	HQP	Currently @
L. Aleksandrov	1999-05	RA	Faculty@Bulgarian Academy of Sciences
Postdocs:			
A. Biniaz	2017-	PDF	
J-L. De Carufel	2010-15	PDF	Faculty@U.Ottawa (Canada)
C. Wulf-Nielson	2010-11	PDF	Faculty@U.Copenhagen (Denmark)
H. Zarrabi-Zadeh	2009-11	PDF	Faculty@Sharif U. (Iran)
M. He	2007-08	PDF	Faculty@Dalhousie (Canada)
M. Farshi	2007-09	PDF	Faculty@Yazd (Iran)
P. Carmi	2006-09	PDF	Faculy@Ben-Gurion (Israel)
K. Douieb	2008-10	PDF	SEng/Statistician, Telemetry (UK)
D. Wood	2001-04	PDF	Faculty@Monash U. (Australia)
Doctoral Students:			
S. Eihab	2014-	PhD	
F. Chanchary	2013-	PhD	
A. Biniaz	2013-16	PhD	
A. Nouri	2013-	PhD	
C. Grimm	2012-	PhD	
M. Nikseresht	2007-12	PhD	Innovapost (Ottawa)
K. Shahbaz	2007-13	PhD	Afilias (Toronto)

C. Dillabaugh	2005-13	PhD	Solana Networks (Ottawa)
N. Zeh	1999-2002	PhD	CRC-Chair@Dalhousie
M. Lanthier	1996-1999	PhD	Faculty@Carleton
D. Hutchinson	1996-1999	PhD	Adjunct@Carleton/Principal@Pteran
Masters Students:			
A. Narayanan	2015-	MCS	
K. Crosbie	2014-	MCS	
R. Althunyan	2015-16	MCS	Saudi Arabia
G. Bint	2013-14	MCS	JSI Telecom (Ottawa)
M. Vasanth	2012-15	MCS	Ciena (Ottawa)
M. Eastman	2011-14	MCS	Google(Seatle)
D. Robillard	2007-09	MCS	PhD@Carleton
D. Jansens	2008-10	MCS	Google (Waterloo)
R. Taylor	2005	MCS	Math@Carleton
P. Toopana	2005	MCS	StatsCan (Ottawa)
S. Wuhrer	2005-06	MCS	INRIA (Grenoble)
M. Nikseresht	2005-07	MCS	Innovapost (Ottawa)
J. Yi	2004-04	MCS	ESRI (Ottawa)
H. Guo	2000-02	MCS	CRA (Ottawa)
D. Saraswat	2000-02	MCS	Hi-Tech (India)
L. Farrag	1998	MCS	Hi-Tech
BCS Students:			
G. Bint	2012	NSERC-USRA	MCS@Carleton
S. Pratt	2012	NSERC-USRA	MCS@Waterloo
E. Kaya	2015	DSRI	BCS@Carleton
A. Sadr	2015	Honors Project	
J. Mendek	2013	Honors Project	MCS@Carleton
P. Raubic	2012	Honors Project	
Q. Liu	2012	Honors Project	Hi-Tech
M. Eastman	2011	Honors Project	Amazon
B. Azymbek	2011	Honors Project	Business Analyst (EPAM)
G. Bint	2010	NSERC-USRA	MCS@Carleton
M. Eastman	2010	NSERC-USRA	Amazon
S. Ahuja	2010	Honors Project	Research In Motion (Ottawa)
P. Dao	2006	Honors Project	PhD@Simon Fraser University
L. Dai	2005	Honors Project	
Commonwealth & Exchange Students:			
J.S. Challa	2014-	PhD	BITS, Pilani
A. Nandy	2012-13	CSP(PhD)	ISI, Kolkata
D. Pattanayak	2013	CSP(MCS)	CMI, Madras
J. Babu	2012	CSP(PhD)	Faculty@IIT Kerala
S. Kumari	2012	CSP(PhD)	BITS, Pilani
B. Roy	2012	CSP(PhD)	PDF@IIT Bombay
A. Banik	2012	CSP(PhD)	Faculty@IIT Jodhpur

M. De	2011	CSP(PhD)	Faculty@IISc Bangalore
C. Grimm	2010-11	Exchange(PhD)	Carleton & Magdeburg U.(Germany)
M. Nouri	2010-11	Exchange(PhD)	Shiraz University (Iran)

Contribution to Profession

Research Paper Presentations at (partial list) the Second Canadian Conference in Computational Geometry, Canada; Second Scandinavian Workshop on Algorithmic Theory, Finland; STACS 93, Germany; ALTEC-III Workshop, Hungary; 7th Canadian Conference in Computational Geometry, Canada; 10th ACM-SIAM Symposium on Discrete Algorithms, Baltimore, USA; ISAAC 99, Madras, India; STOC 00, Portland, Oregon; CCCG 03, Lethbridge; CCCG 15, Kingston; Workshop on Introduction to Geometric Algorithms, Mumbai, India, July 2008, Dr. Homi J. Bhabha Birth Centenary Workshop on Introduction to Graph and Geometric Algorithms, Bangalore, India, July 2009, GTAN 2009, Kanchipuram, India, July 2009, 27th Canadian Conference in Computational Geometry, August 2015; University of Saskatchewan, Saskatoon, Canada; Purdue University, USA; Cornell University, Ithaca, USA; University of Pisa, Pisa, Italy; Carleton University, Ottawa, Canada; University of Ottawa, Ottawa, Canada; Max-Planck Institut für Informatik, Saarbrucken, Germany; Lund University, Lund, Sweden; Humbold University, Berlin, Germany; Institute of Mathematical Science, Madras, India; Jai Hind College, Mumbai, India; Tata Institute of Fundamental Research, Bombay, India; Birla Institute of Technology and Sciences, Pilani, India. Indian Institute of Sciences, Bangalore, India. RLINS & SLCS, Madurai, India.

Invited Lectures at 2017 pre-CALDAM Indo-German Workshop on Geometry and Graph Algorithms, 2013 pre-WALCOM School on Graph and Geometric Algorithms, 2009 GTAANS - Seminar on Graph Theory, Algorithms and Networks (Kanchipuram), 2008 TIFR-CRCE Workshop on introduction to geometric algorithms (Mumbai), 2009 Dr. Homi J Bhabha Birth Centenary Workshop in Graph and Geometric Algorithms (Bangalore).

Refereed papers for (partial list) SIAM Jl. Computing, Discrete and Computational Geometry, Information Processing Letters, Computational Geometry: Theory and Applications, Algorithmica, International Jl. of Computational Geometry, IEEE Transactions, Sadhana, ACM Journal of Experimental Algorithms, GeoInformatica, ACM-SODA, ALENEX, CCCG, ACM Symposium of Computational Geometry, ESA, TAPAS, ALENEX, FST-TCS, WADS, SWAT, IPPS, ISAAC, WALCOM.

Reviewed Research Grants for Natural Sciences and Engineering Research Council of Canada, MITACS, Ontario Graduate Studies Scholarships, Research Grant Council of Hong Kong, and Israel Science Foundation.

Member of Editorial Board/Program Committee/PC-Chair/Advisory Board/Workshop Coordinator of 2018 Conference on Algorithms and Discrete Applied Mathematics (CALDAM) (IIT Gauhwati), 2017 Symposium on Computational Geometry (SoCG) (Brisbane Australia), 2017 Conference on Algorithms and Discrete Applied Mathematics (CALDAM) (BITS Goa), 2016 Conference on Algorithms and Discrete Applied Mathematics (CALDAM) (University of Kerala), 2015 Conference on Algorithms and Discrete Applied Mathematics (CALDAM) (IIT Kanpur), 2015 Canadian Conference in Computational Geometry (Kingston), 2013 Canadian Conference in Computational Geometry (Waterloo), 2013 Workshop on Algorithms and Computation (Kharagpur, India), 2012 Fields Institute Workshop on Discrete and Compu-

tational Geometry (Ottawa), 2012 Canadian Conference in Computational Geometry (PEI), 2012 The 8th IEEE International Wireless Communications & Mobile Computing Conference (Cyprus), 2012 International Conference on Interactive Systems (Goa, India), 2011 Facilitator for the session on "Joint Research" for the first-ever Canada-India Education Summit of Vice-Chancellors and University Presidents, 2011 Frontier of Computer Science and Technology (Changsha, China), 2010 Canadian Conference in Computational Geometry (Winnipeg), 2010 Fields Institute Workshop on Discrete and Computational Geometry (Ottawa), 2010 International Conference on Frontier of Computer Science and Technology (Changchun, China), 2009 Fields Institute Workshop on Discrete and Computational Geometry (Gatineau), Editorial Board of the International Journal of Mathematics and Mathematical Sciences since 2010, 2009 Workshop on Introduction to Graphs and Geometric Algorithms, jointly organized by BITS (Pilani, India) and TIFR (Mumbai, India) on the Birth Centenary of Dr. Homi J. Bhabha, 2009 Workshop on Algorithms and Computation (Calcutta, India), 2008 International Conference on Emerging Technologies and Applications in Engineering, Technology and Sciences, (Rajkot, India), 2007 Canadian Conference in Computational Geometry (Ottawa), 2005 Canadian Conference in Computational Geometry (Windsor), 2005 ALENEX (Vancouver), 1999 Workshop on Algorithms and Data Structures (Ottawa), 1996 Canadian Conference in Computational Geometry (Ottawa).

Collaborated with (partial list) L. Aleksandrov (Bulgarian Academy of Sciences, Bulgaria), S. Arikati (Max-Planck Institut für Informatik), R. Atanassov (Carleton, Canada), J. Augustine (IIT, India), S. Banerjee (ISI, Kolkata), J. Babu (IISc, India), A. Banik (ISI, India), J. Bhadury (New Brunswick, Canada), B. Bhattacharya (ISI, Kolkata), F. Bauernöppel (Humbold, Germany), A. Biniaz (Carleton, Canada), G. Bint (Carleton, Canada), P. Bose (Carleton, Canada), P. Carmi (Carleton, Canada), T. Chandrasekaran (Univ. of Texas, USA), S. Collette (Brussels), M. Couture (Carleton, Canada), V. Chandru (IISc, India), J. Czyzowicz (Univ. Quebec at Hull), M. Damian (USA), S. Das (ISI, India), A. Datta (Univ. Western Australia), M. De (ISI, India), F. Dehne (Carleton, Canada), A. Dessmark (Lund, Sweden), W. Dittrich (Bosch Telecom, Germany), H. Djidjev (Los Almos Labs, USA), K. Douieb (Carleton, Canada), M. Eastman (Carleton, Canada), M. Farshi (Iran), R. Flatland (USA), A. Gheibi (Carleton, Canada), M. Ghodsi (Sharif, Iran), S.K. Ghosh (TIFR, India), S. Govindrajan (Duke, USA), P. Goswami (Univ. Calcutta, India), C. Grimm (Magdeburg, Germany), H. Guo (Carleton. Canada), D. Hutchinson (Pteran, Canada), A. Karmarkar (ISI, Kolkata), M. Katz (Ben-Gurion, Israel), E. Kranakis (Carleton, Canada), M. van Kreveld (Utrecht, Holland), D. Krizanc (Wesleyan, USA), L. Kuttner (Carleton, Canada), S. Langerman (Brussels), M. Lanthier (Carleton, Canada), A. Lingas (Lund, Sweden), T. Lukovski (Univ. Paderborn, Germany), C.E. Veni Madhavan (IISc, India), P. Morin (Carleton, Canada), J. Morrison (U. Winnipeg, Canada), G. Narasimhan (Miami, USA), S. Nandy (ISI Calcutta, India), M. Noy (Barcelona, Spain), M. Nouri (Sharif, Iran), D. Nussbaum (Carleton, Canada), S.P. Pal (IIT Kharagpur, India), M. Paquette (Carleton, Canada), V.T. Rajan (IBM, USA), S. Roy (TRDCC, India), D. Roytenberg (Carleton, Canada), J.-R. Sack (Carleton, Canada), Swami Sarvattomananda (Vivekanand University, India), S. Saluja (TIFR, India), C. Scheffer (Dortmund, Germany), A. Somayaji (Carleton, Canada), C. Shu (NRC, Canada), M. Smid (Carleton, Canada), Y. Tang (Carleton, Canada), R. Taylor (Carleton, Canada), J. Urrutia (UNAM, Mexico), J. Vahrenhold (Dortmund, Germany), J. Yi (Carleton, Canada) C. Zaroliagis (Patras, Greece), N. Zeh (Dulhousie, Canada).

Administrative duties at Carleton

2016-17: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton. Science representative of Senate Academic Program Committee (SAPC), Member of Senate from the School of Computer Science, Graduate Director of the School of Computer Science.

2015-16: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton. Science representative of Senate Academic Program Committee (SAPC), Graduate Director of the School of Computer Science and Director for the Joint Ottawa-Carleton Institute for Computer Science. Hiring Committee of the School of Computer Science.

2014-15: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton. Science representative of Senate Academic Program Committee (SAPC), Member of the University Scholarship Committee, Graduate Director of the School of Computer Science, Director for the Joint Ottawa-Carleton Institute for Computer Science.

2013-14: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton. Science representative of Senate Academic Program Committee (SAPC), Member of the University Scholarship Committee, Graduate Director of the School of Computer Science, Director for the Joint Ottawa-Carleton Institute for Computer Science.

2012-13: On Sabbatical. Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton. Science representative of Senate Academic Program Committee (SAPC), Member of the University Scholarship Committee.

2011-12: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton, Science representative of Senate Academic Program Committee (SAPC), Member of the University Scholarship Committee, Member of Curriculum Reinvention at SCS

2010-11: Member of the Canada-India Center for Excellence in Science, Technology, Trade and Policy at Carleton, Science representative of Senate Academic Program Committee (SAPC), Member of Curriculum Reinvention at SCS.

2009-10: Member of the Universities Graduate Programs and Planning Committee, Member of OCICS BOM, Member of Curriculum Reinvention at SCS.

2008-09: Member of OGS Scholarship Committee for the Province of Ontario, Member of the Universities Graduate Programs and Planning Committee, Member of OCICS BOM.

2007-08: Member of the Universities Graduate Programs and Planning Committee, Member of OCICS BOM.

2006-07: Member of the Universities Graduate Programs and Planning Committee, Hiring Comm. for CRC Tier Chair II.

2005-06: Member of the Universities Graduate Programs and Planning Committee. In-charge of Algorithms ORU.

2004-05: Member of School's Promotion and Tenure Committee. Member of the Universities Graduate Programs and Planning Committee.

2003-04: Member of School's Promotion and Tenure Committee. Member of the Universities Graduate Programs and Planning Committee.

2002-03: On Sabbatical.

2001-02: Member of School's Promotion and Tenure Committee.

2000-01: Member of School's Promotion and Tenure Committee. Member of Laboratories Committee. Member of Curriculum Committee. Representative of the Library Committee from SCS.

1999-00: Graduate Students Seminar. Member of Laboratories Committee. Member of Curriculum Committee. Representative of the Library Committee from SCS.

1998-99: Joint Coordinator, Discrete Mathematics Day, Winter 1998. Joint Coordinator, Carleton Algorithmic Theory Symposium, Fall 1998. Graduate Students Seminar. Member of Laboratories Committee. Representative of the Library Committee from SCS.

1998 C3.ca initiative.

1998 CFI/ORDCF Application for the Eastern Ontario Initiative for High-Performance Infrastructure. This led to the creation of the HPCVL infrastructure.

1998-2001 Co-Principal Investigator for the Parallel and Distributed Geomatics Network within the GEOIDE NCE Network.

1997-98: Joint Coordinator, Carleton Algorithmic Theory Symposium, Fall 1997. Graduate Students Seminar OCICS Seminar. Representative of the Library Committee from SCS.

Volunteer Positions

2012-14 Secretary of Mahatma Gandhi Peace Council of Ottawa.

2011 Assistant Coach of Nepean Pirates 4-on-4 Summer Hockey.

2007 Assistant Coach of OSU Boys Soccer U9 Team.

List of Publications

Currently Under Review

1. A. Biniaz, P. Bose, K. Crosbie, J.-L. De Carufel, D. Eppstein, A. Maheshwari, and M. Smid, Maximum plane trees in multipartite geometric graphs, submitted February 2017.
2. A. Biniaz, P. Bose, D. Eppstein, A. Maheshwari, P. Morin, and M. Smid, Spanning trees in multipartite geometric graphs, submitted February 2017.
3. F. Chanchary and A. Maheshwari, Counting Subgraphs in Relational Event Graphs, submitted May 2016.
4. A. Biniaz, E. Kranakis, A. Maheshwari, and M. Smid, Plane and Planarity Thresholds for Random Geometric Graphs, submitted May 2016 in the special issue of ALGOSENSORS 2015.
5. A. Maheshwari, J.-R. Sack, and C. Scheffer, Approximating the integral Frechet distance, submitted May 2016 (preliminary version in SWAT 2016).
6. A. B. Roy, S. Govindarajan, A. Maheshwari, N. Misra, S. C. Nandy, and S. Shetty, The runaway rectangle escape problem, submitted February 2016.

7. S. Sadhu, S. Roy, S. Nandi, A. Maheswari, and S. C. Nandy, Approximation algorithms for the two-center problem of convex polygon, submitted June 2016 (arXiv:1512.02356).
8. A. Gheibi, A. Maheshwari, J.-R. Sack and C. Scheffer, Path refinement in weighted regions, submitted August 2015.
9. A. Gheibi, A. Maheshwari and J.-R. Sack, Weighted Minimum Backward Frechet Distance, submitted July 2015.
10. F. Dehne, A. Maheshwari and R. Taylor, An improved algorithm for Hausdorff Voronoi Diagram for non-crossing sets, submitted in May 2006 (preliminary version appeared in ICPP 2006).

In Journals

1. A. Biniaz, P. Bose, J-L. De Carufel, C. Gavoille, A. Maheshwari, G. Rote, and M. Smid, Towards plane spanners of degree 3, Journal of Computational Geometry, 8(1): 11-31, 2017. (preliminary version in ISAAC 2016: 19:1-19:14, December 2016.)
2. A. Biniaz, A. Maheshwari, S.C. Nandy and M. Smid, An optimal algorithm for plane matchings in multipartite geometric graphs, Computational Geometry: Theory and Applications, 63: 1-9, 2017.
3. M. Amani, A. Biniaz, P. Bose, J.-L. De Carufel , A. Maheshwari, and M. Smid, A Plane 1.88-Spanner for Points in Convex Position, submitted March 2016. Journal of Computational Geometry, 7(1): 520–539, 2016. (Preliminary version in SWAT 2016.)
4. A. Biniaz, P. Bose, A. Maheshwari, and M. Smid, Plane Bichromatic Trees of Low Degree, Accepted to Discrete & Computatioanl Geometry (arXiv:1512.02730).
5. A. Biniaz, P. Bose, I. van Duijn, A. Maheshwari, and M. Smid, Faster Algorithms for the Minimum Red-Blue-Purple Spanning Graph Problem, Accepted to Journal of Graph Algorithms and Applications, 2017.
6. C. Dillabaugh, M. He, A. Maheshwari and N. Zeh, I/O-Efficient path traversal in succinct planar graphs, Algorithmica 77(3): 714–755, 2017.
7. P. Bose, P. Carmi, M. Damian, J.-L. De Carufel, D. Hill, A. Maheshwari, Y. Liu, M. Smid, On the Stretch Factor of Convex Polyhedra whose Vertices are (Almost) on a Sphere, Journal of Computation Geometry 7(1): 444-472, 2016.
8. A. Biniaz, P. Liu, A. Maheshwari, and M. Smid, Approximation algorithms for the unit disk cover problem in 2D and 3D, Computational Geometry: Theory and Applications 60: 8-18, 2017 (in the special issue of CCCG 2015).
9. B. Bhattacharya, M. De, A. Maheshwari, S. Nandy and S. Roy, Rectilinear path problems in the presences of rectangular obstacles, submitted May 2015 (preliminary version in CALDAM 2015: 69–80, LNCS, February 2015), to appear in Discrete & Applied Mathematics, Special issue of 1st CALDAM.
10. A. Biniaz, P. Bose, A. Maheshwari, M. Smid, Plane Geodesic Spanning Trees, Hamiltonian Cycles, and Perfect Matchings in a Simple Polygon, Computational Geometry: Theory and Applications 57: 27-39, 2016.

11. A. Biniaz, A. Maheshwari, and M. Smid, Strong matching of points with geometric shapes, to appear in the Computational Geometry: Theory and Applications, Special issue in the memory of Ferran Hurtado. (arXiv:1503.04871).
12. P. Kamousi, S. Lazard, A. Maheshwari and S. Wuhrer, Analysis of Farthest Point Sampling for Approximating Geodesics in a Graph, Computational Geometry: Theory and Applications 57: 1-7, 2016.
13. A. Banik, J-L De Carufel, A. Maheshwari and M. Smid, Discrete Voronoi games and ϵ-nets, in two and three dimensions, Computational Geometry: Theory and Applications 55: 41-58, 2016.
14. A. Biniaz, P. Bose, A. Maheshwari, and M. Smid, Packing plane perfect matchings into a point set, Discrete Mathematics & Theoretical Computer Science 17(2): 119-142 (2015).
15. A. Biniaz, A. Maheshwari, M. Smid: On full Steiner trees in unit disk graphs. Comput. Geom. 48(6): 453-458 (2015).
16. A. Biniaz, A. Maheshwari and M. Smid, Higher-Order Triangular-Distance Delaunay Graphs: Graph-Theoretical Properties, Computational Geometry: Theory and Applications 48(9): 646-660, 2015.
17. A. Biniaz, A. Maheshwari and M. Smid, Matching in Higher-Order Gabriel Graphs, Theoretical Computer Science 596: 67-98, 2015.
18. A. Biniaz, A. Maheshwari and M. Smid, On the hardness of full-Steiner tree problems, Journal of Discrete Algorithms 34: 118-127, 2015.
19. A. Karim Abu-Affash, A. Biniaz, P. Carmi, A. Maheshwari and M. Smid, Approximating the bottleneck plane perfect matching of a point set, Computational Geometry: Theory and Applications 48(9): 718-731, 2015.
20. A. Biniaz, A. Maheshwari and M. Smid, On full Steiner trees in unit disk graphs, Computational Geometry: Theory and Applications 48(6): 453–458, 2015.
21. P. Bose, J.-L. De Carufel, C. Grimm, A. Maheshwari and M. Smid, Optimal data structures for farthest-point queries in cactus networks, Journal of Graph Algorithms and Applications 19(1): 11–41, 2015.
22. J. Babu, A. Biniaz, A. Maheshwari, M. Smid, Fixed-Orientation Equilateral Triangle Matching of Point Sets, Theoretical Computer Science 555: 55-70, 2014 (as an invited article for the special issue on the WALCOM 2013 conference).
23. J-L. De Carufel, A. Gheibi, A. Maheshwari, J.-R. Sack and C. Scheffer, Similarity of polygonal curves in the presence of outliers, Computational Geometry: Theory and Applications 47(5): 625-641, 2014.
24. J.-L. De Carufel, C. Grimm, A. Maheshwari. M. Owen and M. Smid, A note on the unsolvability of the weighted region shortest path problem, Computational Geometry: Theory and Applications 47(7): 724-727, 2014 (premiminary version in EuroCG 2012).
25. A. Biniaz, A. Maheshwari and M. Smid, An optimal algorithm for the Euclidean bottleneck full Steiner tree problem, Computational Geometry: Theory and Applications 47(3): 377-380, 2014.
26. M. Ghodsi, A. Maheshwari, M. Nouri, J.-R. Sack and H. Zarrabi-Zadeh, α-visibility, Computational Geometry: Theory and Applications 47(3): 435-446, 2014 (preliminary version in SWAT 2012, LNCS: 7357:1–12, July 2012).

27. P. Bose, P. Carmi, M. Damian, R. Flatland, M. Katz, and A. Maheshwari, Switching to directional antennas with constant increase in radius and hop distance, Algorithmica 69(2): 397-409, 2014 (preliminary version in WADS 2011).
28. A. Maheshwari, J.-R. Sack, K. Shahbaz and H . Zarrabi-Zadeh, Improved algorithms for partial curve matching, Algorithmica 69(3): 641-657, 2014 (preliminary version in ESA 2011).
29. L. Aleksandrov, H. Djidjev, A. Maheshwari and J.-R. Sack, An approximation algorithm for computing shortest paths in weighted 3-D domains, Discrete and Computational Geometry 50(1): 124–184, 2013.
30. S. Banerjee, B. B. Bhattacharya, S. Das, A. Karmakar, A. Maheshwari and S. Roy, On the Construction of a Generalized Voronoi Inverse of a Rectangular Tessellation, Transactions on Computational Science 20: 22-38, 2013 (preliminary version in International Symposium on Voronoi Diagrams, pp. 132–137, IEEE, June 2012).
31. P. Bose, J.-L. De Carufel, K. Dannies, C. Doell, C. Grimm, A. Maheshwari, S. Schirra and M. Smid, Network Farthest-Point Diagrams, Journal of Computational Geometry 4(1): 182-211, 2013 (preliminary version in CCCG 2012, Charlottetown, PEI).
32. M. De, A. Maheshwari, S.C. Nandy and M. Smid, An in-place priority search tree, Computational Geometry: Theory and Applications 46(3): 310–327, 2013 (preliminary version appeared in CCCG 2011)
33. J. Augustine, S. Das, A. Maheshwari, S. C. Nandy, S. Roy and Swami Sarvattomananda, Localized geometric query problems, Computational Geometry: Theory and Applications 46(3): 340-357, 2013.
34. S. Ghosh, P. Goswami, A. Maheshwari, S. Nandy, S. P. Pal and Swami Sarvattomananda, Algorithms for computing diffuse reflection paths in polygons, The Visual Computer 28(12): 1229–37, 2012 (preliminary version appeared in WALCOM 2009).
35. C. Dillabaugh, M. He and A. Maheshwari, Succinct and I/O efficient data structures for traversal in trees, Algorithmica 63(1-2): 201-223, 2012 (preliminary version appeared in ISAAC 2008).
36. P. Bose, E.Y. Chen, M. He, A. Maheshwari and P. Morin, Succinct geometric indexes supporting point location queries, ACM Transaction on Algorithms 8(2), 2012 (preliminary version appeared in 20th ACM-SIAM SODA 2009: 635–644).
37. A. Maheshwari, M. Smid and N. Zeh, Low-Interference Networks in Metric Spaces of Bounded Doubling Dimension, Information Processing Letters 111, 2011: 1120–23.
38. P. Bose, A. Maheshwari, C. Shu and S. Wuhrer, A survey of geodesic paths on 3D surfaces, Computational Geometry: Theory and Applications 44(9): 486–498, 2011.
39. M. Ahmed, A. Maheshwari, S. Nandy and S. Roy, On the number of shortest descent paths on the surface of a convex terrain, Journal of Discrete Algorithms 9(2): 182–189, 2011.
40. A. Maheshwari, J.-R. Sack, K. Shahbaz and H. Zarrabi-Zadeh, Frechet distance with speed limits, Computational Geometry: Theory and Applications 44(2): 110-120, 2011 (preliminary version appeared in CCCG 2009).

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