

Curriculum Vitae

Name Xiaodong Li

Contact School of Science (Computer Science and Software Engineering)
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Education *Ph.D., Artificial Intelligence*, June 1998
University of Otago, Dunedin, New Zealand
Dip.Com., Information Science, December 1992
University of Otago, Dunedin, New Zealand
B.Sc., Information Science, August 1988
Xidian University, Xi'an, China

Employment

1/2017–present Professor, School of Science (CSSE), RMIT University, Melbourne, Australia
1/2013–12/2016 Associate Professor, School of Science (CSSE), RMIT University, Melbourne, Australia
1/2005–12/2012 Senior Lecturer, School of CS & IT, RMIT University, Melbourne, Australia
1/2001–12/2004 Lecturer, School of Computer Science and IT, RMIT University, Melbourne, Australia
5/1999–12/2000 Lecturer, Gippsland School of Computing, Monash University, Melbourne, Australia
1/1997–5/1999 Associate Lecturer, School of Information and Environmental Sciences, Charles Sturt University, Albury, NSW, Australia

Professional Memberships

IEEE Senior Member; Member of IEEE Computational Intelligence Society.

Member, Task Force on Swarm Intelligence, IEEE Computational Intelligence Society (Vice Chair from 2012 - 2016).

Vice Chair, Task Force on Multi-modal Optimization, IEEE CI Society (from 2015).

Vice Chair, Computational Intelligence Chapter, IEEE Victorian Section, Melbourne, Australia.

Member, Task Force on Evolutionary Computation in Dynamic and Uncertain Environments (ECiDUE), IEEE Computational Intelligence Society.

Member, The Technical Committee on Soft Computing, Systems, Man and Cybernetics Society, IEEE.

Member, Steering committee of Simulated Evolution And Learning (SEAL).

Member, Advisory Board of the Center of Computational Science.

Scientific Advisor, Scientific Advisory Board of the *Complexica* company (an optimization/planning solution provider).

Visiting research fellow at CERCIA, University of Birmingham (12 July - 19 September 2008; 13 - 22 May 2009; 28 August - 11 September 2009), funded by an EPSRC grant.

Journal Editorship

Associate Editor for the journal of *IEEE Transactions on Evolutionary Computation* (since 2008).

Associate Editor for the journal of *Swarm Intelligence* (Springer).

Associate Editor for the *International Journal of Swarm Intelligence Research* (IJSIR).

Member of the editorial board of the journal of *Softcomputing* (Springer).

Member of IASR Board of Editors for the *Journal of Advanced Research in Evolutionary Algorithms* (JAREA).

Guest editor, special issue on “Nature-Inspired Algorithms for Large Scale Global Optimization”, *Information Sciences*, September 2015.

Guest editor, special issue on “Swarm Intelligence”, *IEEE Transactions on Evolutionary Computation*, August 2009.

Guest editor, special issue on “Evolutionary Optimization and Learning”, *Journal of Soft Computing* (to appear).

Guest editor, special issue on “Simulated Evolution and Learning”, *Journal of Evolutionary Intelligence*, Vol.2, 2009.

Guest editor, special issue on “Evolutionary Optimization”, *Journal of Computer Science Technology*, Vol.23, No.1, January 2008.

Guest editor, special issue on “Simulated Evolution and Learning”, *International Journal of Computational Intelligence and Applications* (IJCIA), World Scientific Press, Vol.7, No.2, June 2008,

Guest editor, special issue on “Theoretical Foundations of Evolutionary Computation”, *Journal of Genetic Programming and Evolvable Machines*, Springer, Vol.9, No.2, June 2008.

Guest editor, special issue on “Evolutionary Learning and Optimization”, *Connection Science*, Vol.19, No.4, December 2007.

Citation Stats

h-index: 38; total citations: 6849 (according to Google Scholar, 16/11/2017).

Research Awards

Recipient of **2013 ACM SIGEVO Impact Award**.

2017 IEEE Transactions on Evolutionary Computation Outstanding Paper Award.

“**Pengcheng Scholar**” (Adjunct Professor), Southern University of Science and Technology of China (SUSTC), 2017 - 2018.

Research Supervision

I have successfully supervised to completion 6 PhD students (as the first supervisor) and 6 PhD students (as the 2nd supervisor). Currently I am supervising 7 PhD students as the first supervisor, and co-supervising 4 other PhD students. I have also supervised several master and honours students.

Research Grants

1. Dr Xiaodong Li, Charles Sturt University Small Seed Grant, 1999 (\$4000).
2. A/Prof. Vic Ciesielski, Dr Xiaodong Li and Dr Faye Liu, VPAC Expertise Program Grants, Genetic Programming with Expensive Fitness Evaluation, 2002 (\$24000).

3. Dr Xiaodong Li and Dr Andy Song, School of Computer Science and IT Research Grant, Multiobjective Optimization in Genetic Programming, 2004 (\$5000).
4. Dr Xiaodong Li, A/Prof. Vic Ciesielski, and Dr. Andy Song, VPAC Expertise Program Grant, Improving Genetic Programming for Classification Based on a Multiobjective Approach, 2004 (\$17500).
5. Dr Xiaodong Li, 2010 RMIT Foundation Visiting Fellowship (\$3350).
6. Dr Xiaodong Li (RMIT), Prof. Xin Yao (University of Birmingham), “Novel Decomposition Methods for Large Scale Optimization”, ARC Discovery Grant (DP120102205), 2012 - 2014 (\$317K).
7. Prof. Athman Bouguettaya, Dr Margaret Hamilton, Dr Flora Salim, Dr Xiaodong Li, Prof. Xinghuo Yu, and Prof. William Appelbe, “An integrated and real-time passenger travel and public transport service information system”, ARC Linkage Grant (LP120200305), 2012 - 2015 (\$510K).
8. Dr Xiaodong Li, Dr Fabio Zambetta, Dr Florian Mueller, Mr Clark J. Kirby, “Enhancing the Australian theme park experience by harnessing virtual-physical play”, ARC Linkage Grant (LP130100743), 2013 - 2016 (\$300K).
9. Prof Jiyuan Yu, Dr Chi Pok Cheung, Dr Xiaodong Li, Dr Akbar Afaghi-Khatibi, Dr Samuel J. Meure, Mr Andrew Glynn, “Developing an integrated optimisation platform for innovative design of composite fabrication process”, ARC Linkage Grant (LP130100236), 2013 - 2016 (\$205K).
10. Dr Xiaodong Li, “Human like synthetic force development”, DSTO Grant, 2013 - 2016 (\$133K).
11. Dr Xiaodong Li, 2013 RMIT Foundation International Research Exchange Fellowship (\$9210).
12. Dr Xiaodong Li, 2015 Scheme for Teaching and Learning Research (STeLR) Grant (\$10.9K).
13. Dr Xiaodong Li, 2015 Xidian University Foreign Expert Teaching Grant (\$6K).
14. Dr Xiaodong Li, 2016 RMIT Foundation International Visiting Fellowship (\$7350).
15. Prof. Andrew Eberhard, Prof. John Hearne, Dr Vera Roshchina, Dr Fabricio Oliverira, Prof. Xiaodong Li, RMIT ECP Capability Development Fund, “Expanding the Collaborative Networks of the RMITOpt and ECML groups to embrace Aged Care”, 2017 (\$2.05K).
16. Prof. Xiaodong Li, Prof. Andreas Ernest, Prof. Kalyanmoy Deb, “Hybrid methods with decomposition for large scale optimization”, ARC Discovery Grant (DP180101170), 2018 - 2020 (\$352K).

Research Grant Assessment

1. Assessor for ARC Discovery Grants, 2012 - 2018;
2. Assessor for ARC Future Fellowships, 2012 - 2016;
3. Assessor for ARC DECRA Fellowships, 2013, 2016, 2017;
4. Assessor for General Research Fund (GRF), Research Grants Council (RGC) of Hong Kong, 2012, 2013, 2014.
5. Assessor for EPSRC Grants, 2013.

Conference Chairs

Technical Chair, The IEEE Congress on Evolutionary Computation (CEC'2018), part of WCCI'2018, Rio de Janeiro, Brazil, July 8 - 13, 2018.

Technical Committee Co-Chair, The Eighth International Conference on Swarm Intelligence (ICSI 2017), Fukuoka, Japan, July 27 - August 1, 2017.

Technical Committee Co-Chair, The International Conference on Simulated Evolution And Learning (SEAL'2017), Shenzhen, China, 2017.

Co-chair of the track on Ant Colony Optimization and Swarm Intelligence, The Genetic and Evolutionary Computation Conference (GECCO 2017), July 15-19, 2017, Berlin, Germany.

General Chair, The Australasian Joint Conference on Artificial Intelligence(AI'17), Melbourne, Australia.

General Chair, The Australasian Conference on Artificial Life and Computational Intelligence (ACALCI'2017), Melbourne, Australia.

Co-chair of the track on Ant Colony Optimization and Swarm Intelligence, The Genetic and Evolutionary Computation Conference (GECCO'2016), July 20-24, 2016, Denver, Colorado, USA.

Technical Program Chair, The Tenth International Conference on Swarm Intelligence (ANTS 2016), September 7-9, 2016, Brussels, Belgium.

Program Co-chair, The Australasian Conference on Artificial Life and Computational Intelligence (ACALCI'2016), February 2-5, 2016, Canberra, Australia.

Publicity Co-Chair, IEEE Symposium Series on Computational Intelligence (IEEE SSCI'2015), South Africa.

Program Co-Chair, IEEE Congress on Evolutionary Computation 2012 (CEC'2012), Brisbane, Australia, 10 - 15 June 2012.

Publicity chair, Second International Conference on Swarm Intelligence (ICSI'2011), Chongqing, China, 12 - 15 June 2011.

Technical Committee Chair, International Conference on Swarm Intelligence (ICSI'2010), 6 - 9 June 2010.

Publicity Co-Chair, Seventh International Conference on Swarm Intelligence (ANTS'2010), 8 - 10 September 2010.

Organizing chair, 2010 IEEE CEC Special Session on Niching Methods for Multimodal Optimization, 18 - 23 July 2010, Barcelona, Spain.

Program Co-chair, 22nd Australasian Joint Conference on Artificial Intelligence (AI'09), 1 - 4 December, 2009.

Organizing chair, First Australasian Computational Intelligence Summer School (ACISS09), 30 November - 1 December, 2009.

General Chair, Seventh International Conference on Simulated Evolution And Learning (SEAL'08), 7 - 10 December, 2008.

Publicity chair and steering committee member, IEEE Swarm Intelligence Symposium 2007 (SIS2007), Honolulu, Hawaii, USA, 1 - 5 April, 2007.

Organizing chair, special session on Swarm Intelligence, CEC'06.

Tutorial and special sessions chair, Sixth International Conference on Evolution And Learning (SEAL'06), Hefei, China, 15 - 18 October, 2006.

Organizing chair, special session on Swarm Intelligence, CEC'04.

Organizing chair, special session on Swarm Intelligence and Its Applications, CEC'03.

External PhD Examinations

PhD thesis, Department of Information Science, University of Otago, New Zealand, 2004.

PhD thesis, Department of Computer Science, University of Pretoria, South Africa, 2005.

PhD thesis, Department of Information Science, University of Otago, New Zealand, 2007.

PhD thesis, Department of Mechanical Engineering, The University of Melbourne, Australia, 2009.

PhD thesis, School of Aerospace, Civil and Mechanical Engineering, The University of New South Wales, Australia, 2009.

PhD thesis, School of Engineering and Information Technology, University College, University of New South Wales, Australian Defence Force Academy, Australia, 2009.

PhD thesis, Department of Computer Science, University of Pretoria, South Africa, 2009.

PhD thesis, School of Information Technology and Electrical Engineering, University of Queensland, Australia, 2011.

PhD thesis, Department of Statistics, Macquarie University, Australia, 2012.

PhD thesis, School of Computer Engineering, Nanyang Technological University, 2013.

PhD thesis, School of Computer Science, University of Adelaide, 2013.

PhD thesis, Faculty of ICT, Swinburne University of Technology, 2013.

Co-ordination for nominating IEEE CIS awards

Invited (one of five) to write a reference letter to nominate Kenneth Price and Rainer Storn (the inventor of Differential Evolution) for the *IEEE CIS Evolutionary Computation Pioneer Award*.

Invited (one of five) to write a reference letter to successfully nominate Prof. Russell C. Eberhart and Prof. James Kennedy for the *IEEE CIS Evolutionary Computation Pioneer Award* on their 1995 work on PSO.

Co-ordinator for the successful nomination of 2009 IEEE CIS Outstanding Ph.D. Dissertation award - "Generalization and Diversity in Co-evolutionary Learning" by Siang Yew Chong.

Co-ordinator for the successful nomination of 2011 IEEE Computational Intelligence Society, *IEEE Transactions on Evolutionary Computation* Outstanding paper award - "Measuring Generalization Performance in Coevolutionary Learning," published in IEEE TEVC, vol. 12, no. 4, pp. 479-505, August 2008.

Talks and Tutorials

Keynote talk "Seeking multiple solutions: multi-modal optimisation using niching methods", SEAL'2017, 11 November 2017; also invited talk at AMSIOptimise'17 (27 June 2017).

Tutorial on "Evolutionary Large-Scale Global Optimization: An Introduction", IEEE CEC 2017, GECCO 2017, SEAL'2017.

Invited talk on "Recent Advances on Niching Methods for Multimodal Optimization", Guangdong University of Technology (24 March 2016); Xidian University (18 April 2016), Victoria University of Wellington (5 May 2016), Southern University of Science and Technology of China (31 May 2017);

Invited talk on "Decomposition and Cooperative Coevolution Techniques for Large Scale Global Optimization", Sun Yat-sen University, Xidian University, Xi'an Jiaotong University, Guangdong University of Technology, China, April 2015; Dalian University of Technology, May 2015; Xiangtan University, April 2016; Jiangnan University, April 2016; Victoria University of Wellington, May 2016; South China University of Technology, April 2016.

Invited talk on "Swarm Intelligence", Xidian University, South China University of Technology, China, April 2015; Dalian University of Technology, May 2015; Xi'an University of Technology, June 2015; China University of Petroleum (East China), March 2016.

A Panellist on the "Big Data and Computational Intelligence Panel" at WCCI'2014.

Tutorial on "Decomposition and Cooperative Coevolution Techniques for Large Scale Global Optimization" at WCCI'2014 and GECCO'2014.

Tutorial on "Decomposition via Cooperative Coevolution for Large Scale Global Optimization", 2013 IEEE Congress on Evolutionary Computation (CEC'2013), 19 June 2013, Cancun, Mexico.

Invited lectures, "Decomposition via Cooperative Coevolution for Large Scale Global Optimization" and "Swarm Intelligence", 2012 International Workshop on Nature Inspired Computation and Applications (IWNICA'12), Hefei, China, 22 - 25 October 2012.

Invited lectures, “Decomposition via Cooperative Coevolution for Large Scale Global Optimization”, Xidian University, Xi’an, China, 28 and 30 October 2012.

Invited talk on “Introduction to Particle Swarm Optimization”, Victorian University of Wellington, New Zealand, 4 May 2012.

Invited lecture on “Advances on Particle Swarm Optimization”, Sun Yat-sen University Computational Intelligence Winter School 2011, Guangzhou, China, 24 - 28 January 2011.

Seminar talk on “Particle Swarm Optimization”, School of Mathematical and Geospatial Sciences, RMIT University, 28 May 2010.

Seminar talk on “Recent developments on Particle Swarm Optimization”, University of Science and Technology of China (USTC), China, 24 September 2008.

Tutorial on “Particle Swarm Optimization”, with Prof. Andries P. Engelbrecht, GECCO’07, London, UK, 7 - 11 July 2007.

Invited tutorial on “Particle Swarm Optimization” SEAL’06, Hefei, China, 15 - 18 October 2006.

Seminar talk on “Multiobjective Optimization using Particle Swarms”, Monash University, Melbourne, 2005.

Media Interviews

A short media interview by “theAge” Fairfax Science Columnist Peter Spink on “Has the Turing Test really been passed?”, on 10 July 2014.

Publications

Edited Books and Special Issues

1. Wagner, M., Li, X. and Hendtlass, T. (Eds.), *The Proceedings of Third Australasian Conference on Artificial Life and Computational Intelligence (ACALCI 2017)*, Lecture Notes in Artificial Intelligence (LNAI 10142), Geelong, Australia, January 31 - February 2, 2017.
2. Ray, T., Ruhul, S. and Li, X. (Eds.), *The Proceedings of Second Australasian Conference on Artificial Life and Computational Intelligence (ACALCI 2016)*, Lecture Notes in Artificial Intelligence (LNAI 9592), Canberra, Australia, February 2 - 5, 2016.
3. Fang, W., Li, X., Hu, M. and Zhang, M. (Eds.), *Special Issue of Journal of Applied Mathematics on “Nature-Inspired Algorithms for Real-world Optimization Problems”*, August 2015.
4. Li, X., Tang, K., Suganthan, P.N. and Yang, Z. (Eds.), *Special Issue on “Nature-Inspired Algorithms for Large Scale Global Optimization”*, *Information Sciences Journal (ISJ)*, Volume 316, pp. 437-615, September 2015.
5. Dick, G., Browne, WN., Whigham, P., Zhang, M., Bui, L.T., Ishibuchi, H., Jin, Y., Li, X., Shi, Y., Singh, P., Tan, KC., Tang, K. (Eds.), *The Proceedings of the 10th International Conference on Simulated Evolution And Learning (SEAL 2014)*, Lecture Notes in Computer Science (LNCS 8886), Dunedin, New Zealand, December 15 - 18, 2014. 862 pages. ISBN 978-3-319-13562-5.
6. Cheung, Y.M., Wang, Y., Liu, H. and Li, X., *Special Issue on “Selected Papers from the Ninth International Conference on Computational Intelligence and Security”*, *The Scientific World Journal*, 2014.
7. Zhang, M., Kirley, M., Li, X., *Special Issue on “Evolutionary Optimization and Learning”*, *Journal of Soft Computing*, Vol.15, No.9, 2011.
8. Kirley, M., Zhang, M. and Li, X., *Special Issue on “Simulated Evolution and Learning”*, *Journal of Evolutionary Intelligence*, Vol.2, 2009.
9. Nicholson, A. and Li, X., *The Proceedings of the 22nd Australasian Joint Conference on Artificial Intelligence (AI 2009)*, Lecture Notes in Computer Science (LNCS 5866), Melbourne, Australia, December 1 - 4, 2009.

10. Engelbrecht, A., Li, X., Gambardella, L. and Middendorf, M., *Special Issue on “Swarm Intelligence”*, *IEEE Transactions on Evolutionary Computation*, Vol. 13, No.4. August, 2009.
11. Li, X., Kirley, M., Zhang, M., Green, D., Ciesielski, V., Abbass, H., Michalewicz, Z., Hendtlass, T., Deb, K., Tan, K.C., Branke, J., Shi, Y. (Eds.), *The Proceedings of the 7th International Conference on Simulated Evolution And Learning (SEAL 2008)*, Lecture Notes in Computer Science (LNCS 5361), Melbourne, Australia, December 7 - 10, 2008. 658 pages. ISBN: 978-3-540-89693-7.
12. Li, X., Luo, W. and Yao, X. (eds.), *Special Issue on “Evolutionary Optimization”*, *Journal of Computer Science Technology*, Vol.23, No.1, January 2008.
13. Li, X., Luo, W. and Yao, X. (eds.), *Special Issue on “Simulated Evolution and Learning”*, *International Journal of Computational Intelligence and Applications (IJCIA)*, World Scientific Press, Vol.7, No.2, June 2008.
14. Li, X., Luo, W. and Yao, X. (eds.), *Special Issue on “Theoretical Foundations of Evolutionary Computation”*, *Journal of Genetic Programming and Evolvable Machines*, Springer, Vol.9, No.2, June 2008.
15. Li, X., Luo, W. and Yao, X. (eds.) (2007). *Special Issue on “Evolutionary Learning and Optimization”*, *Connection Science*, Volume 19, Issue 4, December 2007, Taylor & Francis, London, UK.
16. Wang, T.-D., Li, X., Chen, S.-H., Wang, X., Abbass, H., Iba, H., Chen, G. and Yao, X. (eds.), *The Proceedings of the 6th International Conference on Simulated Evolution And Learning (SEAL 2006)*, Lecture Notes in Computer Science (LNCS 4247), Hefei, China, October 15-18, 2006. 940 pages. ISBN: 3-540-47331-9.

Book Chapters

17. Li, X., “Multimodal Optimization using Niching Methods,” in *Wiley Encyclopedia of Electrical and Electronics Engineering*, Wiley (accepted on 01/09/2016).
18. Carrese, R., and Li, X., “Preference-based multiobjective PSO for airfoil design,” in *Springer Handbook of Computational Intelligence*, (Kacprzyk and Pedrycz, eds.), pp. 1311–1331, Springer, 2015.
19. Li, X., “Swarm Intelligence,” in *Computational Intelligence* (6.44.40-55 UNESCO Encyclopedia of Life Support Systems (EOLSS)), EOLSS Publishers, Oxford, UK, Vol.II, pp. 87-112, 2015.
20. Li, X., “Developing niching algorithms in particle swarm optimization,” in *Handbook of Swarm Intelligence Concepts, Principles and Applications, Series on Adaptation, Learning, and Optimization*, (B. K. Panigrahi, Y. Shi, and M. H. Lim, eds.), vol. 8, pp. 67–88, Springer, 2011.
21. Bird, S., and Li, X., “Improving local convergence in particle swarms by fitness approximation using regression,” in *Computational Intelligence in Expensive Optimization Problems*, (Y. Tenne, and C. K. Goh, eds.), vol. 2, pp. 265–293, Springer, 2010.
22. Blum, C., and Li, X., “Swarm intelligence in optimization,” in *Swarm Intelligence - Introduction and Applications*, (C. Blum, and D. Merkle, eds.), pp. 43–85, Springer, 2008.
23. Blackwell, T., Branke, J., and Li, X., “Particle swarms for dynamic optimization problems,” in *Swarm Intelligence - Introduction and Applications*, (C. Blum, and D. Merkle, eds.), pp. 193–217, Springer, 2008.
24. Li, X., and Sutherland, S., “A Real-Coded Cellular Genetic Algorithm Inspired by Predator-Prey Interactions”, in K.C. Tan, M.H. Lim, X. Yao, and L. Wang (eds.) *Recent Advances in Simulated Evolution and Learning, Advances in Natural Computation*. World Scientific, 2004.
25. Li, X., and Magill, W., “Modelling Fire Behaviours under Environmental Influences Using a Cellular Automaton Approach”, *Applied Complexity - from Neural Nets to Managed Landscape*, S. Halloy and T. Williams (eds.), pp. 164–178, 2000.

Refereed Journal Papers

26. Wang, Y., Liu, H., Wei, F., Zong, T., and Li, X., “Cooperative Co-evolution with Formula-based Variable Grouping for Large-Scale Global Optimization”, *Evolutionary Computation Journal*, MIT Press, 2017 (published online).

27. Lin, J. Wang, Z.J., and Li, X., “A backtracking search hyper-heuristic for the distributed assembly flow-shop scheduling problem”, *Swarm and Evolutionary Computation* (accepted on 29/04/2017).
28. Islam, M.J., Li, X., and Mei, Y., “A Time-Varying Transfer Function for Balancing Exploration and Exploitation ability of a Binary PSO”, *Applied Softcomputing* (accepted on 24/04/2017).
29. Omidvar, M., Yang, M., Mei, Y., Li, X., and Yao, X., “DG2: A Faster and More Accurate Differential Grouping for Large-Scale Black-Box Optimization,” in *IEEE Transactions on Evolutionary Computation* (available online 29/03/2017).
30. Li, N., Cheung, S., Li, X. and Tu, J., “Multi-objective optimization of HVAC system using NSPSO and adaptive sampling - a case study”, *Building and Environment* (accepted, 08/01/2017).
31. Tamassia, M., Zambetta, F., Raffe, W.L., Mueller, F.F., and Li, X., “Learning Options from Demonstrations: A Pac-Man Case Study”, *IEEE Transactions on Computational Intelligence and AI in Games* (accepted, 05/01/2017).
32. Sun, G., Zhang, A., Jia, X., Li, X., and Wang, Z., “A dynamic neighborhood learning-based GSA with convergence criteria”, *IEEE Transactions on Cybernetics* (accepted on 14/12/2016).
33. Li, X., Epitropakis, M.G., Deb, K., and Engelbrecht, A., “Seeking Multiple Solutions: an Updated Survey on Niching Methods and Their Applications”, *IEEE Transactions on Evolutionary Computation*, 21(4):518 - 538, August 2017.
34. Qi, Y., Yu, J., Li, X., Wei, Y., and Miao, Q., “Reservoir Flood Control Operation Using Multi-objective Evolutionary Algorithm with Decomposition and Preferences”, *Applied Soft Computing*, 50: 21 – 33, 2017.
35. Zheng, J., Yu, G., Zhu, Q., Li, X., and Zou, J., “On decomposition methods in interactive user-preference based optimization”, *Applied Soft Computing*, 52: 952 – 973, 2017.
36. Xie, J., Mei, Y., Ernst, A.T., Li, X., and Song, A., “A Bi-level Optimization Model for Grouping Constrained Storage Location Assignment Problems”, *IEEE Transactions on Cybernetics* (accepted, 29/11/2016).
37. Yang, M., Omidvar, M., Li, C., Li, X., Cai, Z., Kazimipour, B. and Yao, X., “Efficient Resource Allocation in Cooperative Co-evolution for Large-Scale Global Optimization”, *IEEE Transactions on Evolutionary Computation*, 21(4):493 - 505, August 2017.
38. Sun, G., Zhang, A., Jia, X., Li, X., Ji, S., and Wang, Z., “DMMOGSA: Diversity-enhanced and memory-based multi-objective gravitational search algorithm”, *Information Sciences*, 363: 52–71, 2016.
39. Tang, K., Wang, J., Li, X., Yao, X., “A Scalable Approach to Capacitated Arc Routing Problems based on Hierarchical Decomposition”, *IEEE Transactions on Cybernetics* (accepted on 01/07/2016).
40. Lee, G., Zambetta, F., Li, X., Paolini, A., “Utilising Reinforcement Learning to Develop Strategies for Driving Auditory Neural Implants,” *Journal of Neural Engineering*, 13(4):046027, 2016.
41. Ghasemishabankareh, B., Li, X., Ozlen, M., “Cooperative coevolutionary differential evolution with improved augmented Lagrangian to solve constrained optimisation problems,” *Information Sciences*, Volume 369, pp. 441–456, 2016.
42. Qi, Y., Bao, L., Ma, X., Miao, Q., Li, X., “Self-adaptive Multi-objective Evolutionary Algorithm based on Decomposition for Large-scale problems: A Case Study on Reservoir Flood Control Operation,” *Information Sciences*, Volume 367–368, pp. 529–549, 2016.
43. Mei, Y., Salim, F., Li, X., “Efficient Meta-heuristics for the Multi-Objective Time-Dependent Orienteering Problem,” *European Journal of Operational Research*, Volume 254, pp. 443–457, 2016.
44. Liu, J., Mei, Y., and Li, X., “An Analysis of the Inertia Weight Parameter for Binary Particle Swarm Optimization,” in *IEEE Transactions on Evolutionary Computation*, 20(5): 666–681, October 2016.
45. Mei, Y., Li, X., and Yao, X., “On Investigation of Interdependence Between Sub-problems of the Travelling Thief Problem,” in *Softcomputing*, Springer, vol. 20, issue. 1, pp. 157–172, January 2016.

46. Amini, I., Sanderson, M., Martinez, D., and Li, X., "Improving Patient Record Search: A Meta-data based Approach", in *Information Processing & Management*, vol. 52, no. 2, pp. 258–272, 2016.
47. Mei, Y., Omidvar, M., Li, X. and Yao, X. "A Competitive Divide-and-Conquer Algorithm for Unconstrained Large Scale Black-Box Optimization," in *ACM Transactions on Mathematical Software (TOMS)*, 42(2), Article 13, 24 pages, June 2016.
48. Qi, Y., Hou, Z., Li, H., Huang, J., and Li, X., "A Decomposition Based Memetic Algorithm for Multi-objective Vehicle Routing Problem with Time Windows", in *Computers & Operations Research*, vol.62, pp. 61–67, 2015.
49. Omidvar, M., Li, X., and Tang, K., "Designing benchmark problems for large scale continuous optimization," in *Information Sciences*, 316: 419–436, 2015.
50. Raffe, W., Zambetta, F., Li, X., and Stanley, K., "An Integrated Approach to Personalized Procedural Map Generation using Evolutionary Algorithms," in *IEEE Transactions on Computational Intelligence and AI in Games*, vol. 7, issue. 2, pp. 139–155, June 2015.
51. Bonyadi, M.R., Michalewicz, Z., and Li, X., "An analysis of the velocity updating rule of the particle swarm optimization algorithm," in *Journal of Heuristics*, vol. 20, issue. 4, pp. 417–452, 2014.
52. Mei, Y., Li, X., and Yao, X., "Cooperative co-evolution with route distance grouping for large scale capacitated arc routing problems," in *IEEE Transactions on Evolutionary Computation*, vol. 18, issue. 3, pp. 435–449, 2014.
53. Omidvar, M., Li, X., Mei, Y., and Yao, X., "Cooperative co-evolution with differential grouping for large scale optimization," in *IEEE Transactions on Evolutionary Computation*, vol. 18, issue. 3, pp. 378–393, 2014 (**2017 IEEE Transactions on Evolutionary Computation Outstanding Paper Award**).
54. Jiang, B., Wang, N., and Li, X., "Particle swarm optimizer with ageing operator for multimodal function optimization," in *International Journal of Computational Intelligence Systems*, vol. 6, issue. 5, pp. 826–880, 2013.
55. Carrese, R., Winarto, H., Li, X., Sobester, A., and Ebenezer, S., "A comprehensive preference-based optimization framework with application to high-lift aerodynamic design," in *Engineering Optimization*, Taylor & Francis, vol. 44, issue. 10, pp. 1209–1227, 2012.
56. Bonyadi, M.R., and Li, X., "A new discrete electromagnetism-based meta-heuristic for solving the multidimensional knapsack problem using genetic operators," in *Operational Research*, vol. 12, issue. 2, pp. 229–252, 2012.
57. Li, X., and Yao, X., "Cooperatively co-evolving particle swarms for large scale optimization," *IEEE Transactions on Evolutionary Computation*, vol. 16, issue. 2, pp. 210–224, 2012.
58. Carrese, R., Sobester, A., Winarto, H., and Li, X., "Swarm heuristic for identifying preferred solutions in surrogate-based multiobjective engineering design," in *American Institute of Aeronautics and Astronautics (AIAA) Journal*, vol. 49, issue. 7, pp. 1437–1449, 2011.
59. Iorio, A., and Li, X., "Improving the performance and scalability of Differential Evolution on problems exhibiting parameter interactions," *Journal of Soft Computing*, Special issue on "Evolutionary Optimisation and Learning", Springer, 15(9): 1769–1792, 2011.
60. Rönkkönen, J., Li, X., Kyrki, V., and Lampinen, J., "Framework for generating tunable test functions for multimodal optimization," *Journal of Soft Computing*, Special issue on "Evolutionary Optimisation and Learning", Springer, 15(9): 1689-1706, 2011.
61. Li, X., "Niching without niching parameters: Particle swarm optimization using a ring topology," in *IEEE Transactions on Evolutionary Computation*, vol. 14, issue. 1, pp. 150–169, 2010.
62. Zhang, M., Kirley, M. and Li, X., Guest editorial: "Evolutionary Optimization and Learning", *Journal of Soft Computing*, 15(9): 1671 -1673, 2011.
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