**Publications:**

*Edited Journal Issues:*

1. Chan, K.Y., Aydin, M.E., Şeker, H., Palade, V., and Hong, T.-P., Special Issue on “Efficient Fuzzy Systems for Mining Large Scale, Imprecise, Uncertain and Vague Data”, *International Journal of Fuzzy Systems,* 20(4), April 2018.
2. Dereli, T., and Aydin, M.E., Special Issue on “Emergent Computing in Service Management”, *European Journal of Industrial Engineering*, 3(4), December 2009.
3. Aydin, M.E., Özbayrak, M., and Fogarty, T.C., Special Issue on “Advances in Evolutionary Computation for Design and Manufacturing Problems”, *International Journal of Production Research*, 44(22), November 2006.

### *Journal Papers:*

1. Ullah, S., Malik, M.H., Tuysuz, M. F., Hasnain, M.M. andAydin M.E. (2019), “Max-Gain Relay Selection Scheme for Buffer-Aided Wireless Cooperative Networks”, submitted to *IEEE Access*.
2. Tuysuz, M. F., andAydin M.E. (2019), “QoE-assured Mobility-aware Collaborative Multimedia Streaming on the Edge of 5G”, submitted to *IEEE Transactions on Industrial Informatics* (under review, 3rd round)
3. Damaj, I.W., El-Shafei, M., El-Abd, M, Aydin, M.E. (2019), “An Analysis Framework for High-Speed Hardware Particle Swarm Optimization”, *Microprocessors and Microsystems,* 72, 102949 *-* <https://doi.org/10.1016/j.micpro.2019.102949>
4. Walker-Roberts, S., Hammoudeh, M., Aldabbas, O., Aydin, M.E., and Dehghantanha, A., “Threats on the horizon: understanding security threats in the era of cyber-physical systems”, *The Journal of Supercomputer* (2019). (published online) <https://doi.org/10.1007/s11227-019-03028-9>
5. Düg̃enci M., and Aydin M.E. (2019), “A honeybees-inspired heuristic algorithm for numerical optimisation”, *Neural Computation and Applications*. (published online) <https://doi.org/10.1007/s00521-019-04533-x>
6. Comsa, I. S., Zhang, S., Aydin, M., Kuonen, P., Trestian, R., & Ghinea, G. (2019). A Comparison of Reinforcement Learning Algorithms in Fairness-Oriented OFDMA Schedulers. *Information*, *10*(10), 315 – 343.
7. Alidrisi H, Aydin ME, Bafail AO, Abdulal R, Karuvatt SA, (2019), “Monitoring the Performance of Petrochemical Organizations in Saudi Arabia Using Data Envelopment Analysis”, Mathematics, 7(6), 519-534.
8. Comşa, I.-S.,Zhang, S., Aydin, M.E., Kuonen, P., Lu, Y., Trestian, R. and Ghinea, G., (2018), “Towards 5G: a Reinforcement Learning-based Scheduling for Data Traffic Management”, *IEEE Transactions on Network and Service Management*, 15(4), 1661-1675.
9. Düğenci, M., Aydemir, A., Esen, İsmail and Aydin, M. E. (2015), “Creep modelling of polypropylenes using artificial neural networks trained with Bee algorithms”, *Engineering Applications of Artificial Intelligence*, 45, 71-79.
10. Ayhan, M.B., Aydin, M.E., and Oztemel, E., (2015), “Change management for manufacturing systems using a multi-agent framework”, *Journal of Intelligent Manufacturing,* 26(5), 975 – 988.
11. Eke, C.I., Esiefarienrhe, B.M., and Aydin, M. E., (2015), "Conceptual framework for context-aware service discovery in mobile cloud", *International Journal of Scientific Engineering and Applied Science*, 1(4), .170 - 174
12. Eke, C.I., Ezugwu, A.E., Nweke,H.F.,  and  Aydin, M. E., (2013), "Use of Java RMI on Mobile Devices for Peer to Peer Computing", *Network and Complex Systems*, 3(5), 1-10.
13. Aydin, M. E., and Taylan, O., (2013), “Scheduling cutting process for large-paper rolls”, *Academic Platform Journal of Engineering and Science*, Inaugural issue, 1(1), pp 1-6. (invited paper).
14. Aydin, M. E., Kwan, R.  and Wu J., (2013), “Multiuser scheduling on the LTE downlink with metaheuristic approaches”, *Physical Communication*, 9(2013), 257-265.
15. Ayhan, M.B., Oztemel, E., Aydin, M.E., and Yue, Y., (2013), “A Quantitative approach for measuring Process Innovation: A Case study in a manufacturing company”, *International Journal of Production Research,* 51(11), 3463-3475.
16. Şenyiğit, E., Dugenci, M., Aydin, M.E.,, Zeydan, M., (2013), “Heuristic-based neural networks for stochastic dynamic lot-sizing problems”, *Applied Soft Computing Journal,* 3 (3), 1331-1338. (*DOI 10.1016/j.asoc.2012.02.026*)
17. Aydin, M. E., Kwan, R.  Luang, C., Maple, C., and Zhang, J., (2013), “A hybrid swarm intelligence algorithm for multiuser scheduling in high speed downlink packet access”, *Applied Soft Computing Journal*. 13 (5), 2990–2996. (DOI: dx.doi.org/10.1016/j.asoc.2011.12.007)
18. Comsa, I.S.,   Aydin, M.E.,   Zhang, S., Kuonen, P. and   Wagen, J., (2012), “Multi objective resource scheduling in LTE networks using reinforcement learning”, *International Journal of Distributed Systems and Technologies,* 3(2), 39-57.
19. Aydin, M. E., (2012), “Coordinating metaheuristic agents with swarm intelligence”, *Journal of Intelligent Manufacturing*, 23(4), 991-999. DOI: 10.1007/s10845-010-0435-y.
20. Chan , K. Y., Zhu, H-L., Aydin, M. E., Lau, C. C., (2010), “An Evolutionary Variable Neighborhood Search for Selecting Combinational Gene Signatures in Predicting Chemo-response of Osteosarcoma”, *International Journal of Information and System Sciences*, 6(2), 258-269.
21. Chan, K. Y., Kwong, C. K., Jiang, H., Aydin, M. E. , Fogarty, T.C., (2010), “A new orthogonal array based crossover, with analysis of gene interactions, for evolutionary algorithms and its application to car door design”, *Expert Systems and Applications,* 37 (5), 3853–3862.
22. Kwan, R. Aydin, M. E., Luang, C. and Zhang, J., (2009), “Multiuser scheduling in high speed downlink packet access”, *IET Communications*, 3(8), 1363-1370.
23. Chan, K. Y., Aydin, M. E. Ling, S.H., Fogarty, T.C., Iu, H.H.C., (2009), “A statistics-based genetic algorithm for quality improvements of power supplies” *European Journal of Industrial Engineering*, 3(4), 468-492.
24. Dereli, T., Seckiner, S.U., Das, G.S., Gokcen, H., and Aydin, M.E., (2009), “An exploration of the literature on the use of ‘swarm intelligence based techniques’ for public service problems”, *European Journal of Industrial Engineering*, 3(4), 379-423.
25. Chan, K. Y., Fogarty, T.C., Aydin, M. E. Ling, S.H., and  Iu, H.H.C., (2008), “Genetic algorithms with dynamic mutation rates and their industrial applications”, *International Journal of Computational Intelligence and Applications*, 7(2), 103-128.
26. Yang, J., Aydin, M. E., Zhang, J., and Maple, C., (2007), “UMTS base station location planning: A mathematical model and heuristic optimisation algorithms”, IET Communications, 1(5), 1000-1014.
27. Yang, J., Zhang, J., Aydin, M. E., and Wu, J.Y,(2007), “Optimisation of WCDMA radio networks with consideration of link-level performance factors”, Inter. J. of Mobile Network Design and Innovation, Vol. 2 (1), 26-33.
28. Şevkli, M., Aydin,. M.E., (2007), “Parallel variable neighbourhood search for job shop scheduling problems”, IMA Journal of Management Mathematics, 18(2): 117-133.
29. Şevkli, M., Aydin,. M.E., (2006), “Variable neighbourhood search for job shop scheduling problems”, Journal of Software, 1(2), 34-39.
30. Kwong,. C.K., Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2006), “An orthogonal array based genetic algorithm for developing neural network based process models of fluid dispensing”, International Journal of Production Research, 44(22), 4815-4836.
31. Yiğit, V., Aydin,. M.E., and Turkbey, O., (2006), “Solving large scale uncapacitated facility location problems with evolutionary simulated annealing”, International Journal of Production Research, 44(22), 4773-4791.
32. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2006), “Main effect fine-tuning of the mutation operator and the neighbourhood function for uncapacitated facility location problems”, Soft Computing Journal, 10 (11): 1075-1090.
33. Aydin, M.E., and Fogarty, T.C., (2004), "A simulated annealing algorithm for multi-agents systems: A job shop scheduling application" Journal of Intelligent Manufacturing, 15(6), 805-814.
34. Aydin, M.E., and Fogarty, T.C., (2004), "Teams of asynchronous agents for job-shop scheduling problems: an experimental study", Journal of Intelligent Manufacturing 15(4), 455-462.
35. Aydin, M.E., and Fogarty, T.C., (2004), "A Distributed Evolutionary Simulated Annealing for Combinatorial Optimisation Problems", Journal of Heuristics, 10(3), 269-292.
36. Aydin, M.E., and Öztemel, E., (2000), “Dynamic job-shop scheduling using reinforcement learning agents”, Robotics and Autonomous Systems, 33(2-3), 169-178.
37. Öztemel, E., Aydin, M.E., (1996) “An artificial neural network-based experimental design method”, *Journal of Turkish Environment and Engineering,* 20(2), 1996. (In Turkish)
38. Aydin, M.E., (1994), “Taguchi experimental design method and an application in segment industry”, *Standart,* October-1994. (In Turkish)

### *Refereed Conference Papers:*

1. Aydin M.E. and Keleş, R., (2019) “Energy efficient water resource management and optimisation: A multi agent approach”, In *Proceedings of 14th International Symposium on Intelligent Manufacturing and Service Systems*, Sakarya University, 9-12 September 2019, Adapazari, Turkey.
2. Comşa, I.-S.,Zhang, S., Aydin, M.E., Kuonen, P., Lu, Y., Trestian, R. and Ghinea, G., (2019), “Enhancing user fairness in OFDMA Radio Access Networks through machine learning”, Wireless Days 2019, 24 – 26 April 2019, Manchester, UK. IEEE supported.
3. Aydin, M. E. , Oztemel, E., Nashawati, D., Odeh, M., and Mansour, A., (2018), “An agent-based approach for strategic alignment in enterprise systems: A cancer care case”, submitted to *CCI 2018*, IEEE.
4. Düg̃enci M., and Aydin M.E. (2018) Diversifying Search in Bee Algorithms for Numerical Optimisation. *In: Nguyen N., Pimenidis E., Khan Z., Trawiński B. (eds) Computational Collective Intelligence. ICCCI 2018. Lecture Notes in Computer Science*, 11056, pp 132 - 144. Springer, Cham.
5. Aydin M.E., Fellows R. (2018) Building Collaboration in Multi-agent Systems Using Reinforcement Learning. *In: Nguyen N., Pimenidis E., Khan Z., Trawiński B. (eds) Computational Collective Intelligence. ICCCI 2018. Lecture Notes in Computer Science*, 11056, pp 201 - 212. Springer, Cham.
6. Hasnain, M., Malik, M. H., and Aydin, M.E., (2018), “An adaptive opportunistic routing scheme for reliable data delivery in WSNs”, In *Proceedings of the International Conference on Future Networks and Distributed Systems* ACM.
7. Uygun, Ö., Güven, İ., Şimşir, F., and Aydin, M. E. (2018, September). Selecting display products for furniture stores using fuzzy multi-criteria decision-making techniques. In *International Conference on Engineering Applications of Neural Networks* (pp. 181-193). Springer, Cham.
8. Ishaq, M., Malik, M. H., and Aydin, M. E. (2018, September). Managing congestion in vehicular networks using tabu search. In *International Conference on Engineering Applications of Neural Networks* (pp. 118-129). Springer, Cham.
9. Malik, M. H., Majeed, A., Aydin, M. E., & Malik, M. H. (2017, July). A parametric study for congestion control in queuing networks. In *Proceedings of the International Conference on Future Networks and Distributed Systems* (p. 47). ACM.
10. Malik, M.H., Aydin, M.E., Awais, Q., (2015), "Cognitive Access Point to Handle Delay Sensitive Traffic in WLANs," in *Computational Intelligence & Communication Technology (CICT), 2015 IEEE International Conference on*, pp.317-322, 13-14 Feb. 2015.
11. Comsa, I.S.,   Zhang, S., Aydin, M.E.,   Kuonen, P. and   Wagen, J., (2014), “Adaptive Proportional Fair Parameterization Based LTE Scheduling Using Continuous Actor-Critic Reinforcement Learning”, IEEE GLOBECOM 2014, GC Wireless Networking Symposium, Austin, Texas, USA, 8-12 December 2014.
12. Aydin, M. E., (2014), “Neighbourhood search agents for Bin-Packing problems”, 9th International Symposium on Intelligent Manufacturing and Services Systems (IMSS’14), Istanbul, Turkey, 14-16 October 2014.
13. Bayraktar, T., Aydin, M.E., and Dugenci, M., (2014), “Artificial Bee Colony algorithms for Bin-packing Problems*”, 44th International Conference on Computers and Industrial Engineering (CEI’44),* Istanbul, Turkey, 14-16 October 2014.
14. Comsa, I.S.,   Zhang, S., Aydin, M.E.,   Kuonen, P. and   Wagen, J., (2014), “Scheduling policies based on dynamic throughput and fairness trade-off control in LTE-A networks”, *39th Annual IEEE Conference on Local Computer Networks (LCN 2014),* 8-11 September 2014, Edmonton, Canada.
15. Malik, M. H., Aydin, M. E., Shah, Z., and Hussain, S., (2014), “Stochastic Model of TCP and UDP traffic in IEEE 802.11b/g”, *The 9th IEEE Conference on Industrial Electronics and Applications (ICIEA 2014),* in Hangzhou, China, 9-11th June 2014.
16. Kpojime, H. O., Safdar, G. A., and Aydin, M. E., (2013), “ITU-R and WINNER II Path Loss Modelling of Femtocell”, HET-NETs 2013, The 7th International Working Conference, 11-13 Nov.2013, Ilkley, West Yorkshire, UK.
17. Ogur, E., and Aydin, M. E., (2013), “Refining scheduling policies with Genetic Algorithms”, GECCO ECADA Workshop 2013, pp: 1513-1518, 6-10 July 2013, Amsterdam, The Netherlands.
18. Aydin, M. E., Safdar, G.A., and Aslam, N., (2013), “A novel learning-based spectrum sensing technique for Cognitive Radio Networks”, 27th International Conference on Advanced Information Networking and Applications (AINA 2013), Barcelona, Spain, 25-18 March 2013, pp:505-510.
19. Comsa, I.S.,   Zhang, S., Aydin, M.E.,   Kuonen, P. and   Wagen, J., (2012), “A Novel Dynamic Q-Learning-Based Scheduler Technique for LTE-Advanced Technologies Using Neural Networks”, *37th Annual IEEE Conference on Local Computer Networks (LCN 2012),* 22-25 October 2012, Clearwatar, Florida, USA, pp: 336-339.
20. Ogur, E., Aydin, M. E., and Ayhan, M. B., (2012), “Policy refinement with genetic algorithms for job shop scheduling problems”, Intelligent Manufacturing Systems 2012, Antalya, Turkey, 27-28 Sept. 2012.
21. Ayhan, M. B., Aydin, M. E., and Oztemel, E., (2012), “An agent-based change management model for manufacturing systems”, Intelligent Manufacturing Systems 2012, Antalya, Turkey, 27-28 Sept. 2012.
22. Aydin, M. E., Kwan, R., Ding, W., and Wu, J., (2012), “A Genetic Algorithm Approach for Multiuser Scheduling on the LTE downlink”, World Congress on Engineering 2012, London, 4-6 July 2012.
23. Ayhan, M. B., Aydin, M. E., and Oztemel, E., (2012), “Collective Intelligence for Monitoring Innovation and Change in Manufacturing Industry”, World Congress on Engineering 2012, London, 4-6 July 2012.
24. Comsa, I.S.,   Aydin, M.E.,   Zhang, S., Kuonen, P. and   Wagen, J., (2011), “Reinforcement learning based radio resource scheduling in LTE-advanced”, 17th International Conference on Automation and Computing (ICAC), 10/09/2011, pp: 219-224.
25. Aydin, M. E., Kwan, R., Wu, J. and Zhang, J., (2011), “Multiuser scheduling on the LTE downlink with Simulated Annealing”, *IEEE* *VTC’2011-Spring*, 15-18 May 2011, Budapest, Hungary.
26. Aydin, M. E., Bessis, N. and Asimakopoulu, E., Xhafa, F. And Wu, J., (2011), “Scanning Environments with Swarms of Learning Birds: A Computational Intelligence Approach for Managing Disaster” *AINA 2011, 25th IEEE International Conference on Advanced Information Networking and Applications,* Biopolis, Singapore, 22-25 March 2011.
27. Aydin,. M.E., Wu, J. and Zhang, L., (2010), “Swarms of Metaheuristic Agents: A model for collective intelligence*”, 1st International Workshop on Emerging Data Technologies for Collective Intelligence (EDTCI-2010),* Fukuoka Institute of Technology, Fukuoka, Japan , November 4-6, 2010.
28. Aydin,. M.E., (2010), “Collaboration of heterogeneous metaheuristic agents”, *In Proc. of ICADIWT 2010 - The 3rd International Conference on Applications of Digital Information and Web Technologies,* Fatih University, Istanbul, Turkey, July 12-14, 2010.
29. Şevkli, M., Aydin,. M.E., (2009), “Variable neighbourhood tabu search algorithms for permutation flowshop scheduling problems”, *GEM'09 - The 2009 International Conference on Genetic and Evolutionary Methods,* Monte Carlo Resort, Las Vegas, Nevada, USA, July 13-16, 2009.
30. Aydin, M. E., Kwan, R., Luang, C. and Zhang, J., (2009), “Multiuser scheduling in HSDPA using particle swarm optimisation” *EvoCOMNET 2009, Germany,* In: *Lecture Notes in Computer Science,* 5484, 71-80.
31. Kwan, R. Aydin, M. E., Luang, C. and Zhang, J., (2008), “Multiuser scheduling in HSDPA using Simulated Annealing”, *IEEE IWCMC 2008, Crete Island, Greece*.
32. Aydin, M. E., Kwan, R., Luang, C. and Zhang, J., (2008), “A particle swarm optimisation algorithm for multiuser scheduling in HSDPA”, *ANTS 2008, Brussels, Belgium*, In: *Lecture Notes in Computer Science*, 5217, 395-396.
33. Chan, K.Y., Zhu, H.L., Aydin, M. E., Lau, C. C., Wang, H.Q., (2008), “An integrated approach of support vector machine and variable neighbourhood search for discovering combinatorial gene signatures in predicting chemo-response of osteosarcoma” ,IMECS 2008, 19-21 March, 2008 Hong Kong,.
34. Aydin, M.E., (2008), “Swarm Intelligence to coordinate metaheuristic agents”, IMS 2008, 14-16 October 2008, Adapazari, Turkey.
35. Aydin, M. E., Yang, J., and Zhang, J., (2007), “A comparative investigation on heuristic optimisation of WCDMA radio networks”, In: EvoWorkshops 2007, 11-13 April 2007, Valencia, Spain. *Lecture Notes in Computer Science, 4448:111-120*.
36. Zhang, J., Yang, J., Aydin, M. E. and Wu, J. Y., (2007), “A novel programming model and optimisation algorithms for WCDMA networks”, IEEE 65th VTC’2007, 25-26 April 2007, Dublin, Ireland.
37. Aydin, M. E., (2007), “Meta-heuristic agent teams for job shop scheduling problems”, In: HoloMAS 2007, 3-5 September 2007, Regensburg, Germany. *Lecture Notes in Artificial Intelligence,* 4659, 185-194.
38. Zhang, J., Yang, J., Aydin, M. E. and Wu, J. Y., (2006), “Mathematical modelling and comparisons of four heuristic optimization algorithms for WCDMA radio network planning”, In: *Proc. of 8th IEEE ICTON*, GRAAL Annual Conference, June 2006, Nottingham, UK, pp. 253-257.
39. Şevkli, M., Aydin,. M.E., (2006), “Collaborating variable neighbourhood search algorithms for job shop scheduling problems”, *In Pro. of IMS 2006* 29-31 April 2006, Adapazari, Turkey. 261-271.
40. Chan, K.Y., Yiu, C.K.F., Aydin, M.E. and Fogarty, T.C., (2006), “A modified simulated annealing algorithm for solving uncapacitated facility location problems”, In: *Proceedings of the 1st International Conference on Logistic and Supply Chain Management 2006*, Hong Kong.
41. Şevkli, M., Aydin,. M.E., (2006), “A variable neighbourhood search implementation for job shop scheduling problems”, . *In Pro. of EvoCOP 2006* 10-12 April 2006, Budapest, Hungary. *Lecture Notes in Computer Science* 3906: 261-271.
42. Aydin, M.E., (2005), “Sensitivity analysis for job shop scheduling problems”, MISTA2005, 18-21 July 2005, New York University, New York, USA.
43. Aydin,. M.E., (2005), “A robustness index for scheduling based on sensitivity analysis”, *IPROMS 2005,* 4-12 July 2005, Cardiff University*, Cardif, UK .*
44. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2004), "Parameterisation of mutation in evolutionary algorithms using the estimated main effect of genes", *in Proceedings of the IEEE International Congress on Evolutionary Computation*, CEC2004, 19-23 June 2004, Portland, Oregon, USA.
45. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2004), "An empirical study on the performance of factorial design based crossover on parametrical problems", *in Proceedings of the IEEE International Congress on Evolutionary Computation*, CEC2004, 19-23 June 2004, Portland, Oregon, USA.
46. Yigit, V.,Aydin, M.E.,  Turkbey, O., (2004), "Evolutionary simulated annealing algorithms for uncapacitated facility location problems", *in Proceedings of ACDM 2004*, pp. 185-196, 20-22 April 2004, Bristol, UK.
47. Aydin, M.E., Yigit, V., Turker, A.K., (2004), "Performance analysis of operators used in evolutionary simulated annealing ",In *Proceedings of IMS 2004*, 6-8 September 2004, Adapazari, Turkey.
48. Yigit, V.,Aydin, M.E., Turkbey, O., (2004), " Simulated annealing algorithms for large scale uncapacitated facility location problems", In *Proceedings of IMS 2004*, 6-8 September 2004, Adapazari, Turkey.
49. Aydin, M. E., (2003), "Collective learning of infohabitants for Multi-Bar problem by Q-learning algorithm ", *in Proceedings of WI/IAT 2003 Workshop on Knowledge Grid and Grid Intelligence,* 13 October 2003, Halifax, Canada, pp:67-76, 2003.
50. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2003),“New factorial design theoretic genetic crossover operator for parametrical problem”, *In Pro. of EuroGP 2003,* University of Essex, Colchester, UK, *Lecture Notes in Computer Science, 2610, pp:22-34.*
51. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2003) "An epistasis measure based on the analysis of variance for the real-coded representation in genetic algorithms", *in Proceedings of the IEEE International Congress on Evolutionary Computation*, Canberra, Australia, pp. 297-304, 2003.
52. Chan, K. Y., Aydin, M. E. and Fogarty, T. C. (2003)  "A Taguchi method-based crossover operator for the parametrical problems", *in Proceedings of the IEEE International Congress on Evolutionary Computation*, Canberra, Australia, pp. 971-977, 2003.
53. Aydin, M.E., Fogarty, T.C., (2002), " A modular simulated annealing algorithm for multi-agent systems: A job shop scheduling application", *In Proc. of ICRM 2002 (2nd International Conference of Responsive Manufacturing),* 26-18 June 2002,Gaziantep, Turkey.
54. Aydin, M.E., (2001), " Teams of asynchronous agents for job-shop scheduling problems", In :*Proc. of 3nd International Intelligent Manufacturing Systems Symposium*, 3-4 September 2001, Sakarya University, Adapazari, Turkey.
55. Aydin, M.E., Fogarty, T.C., (2001), "Simulated annealing with evolutionary process for job-shop scheduling problems", *In: EUROGEN 2001 - Evolutionary Methods for Design, Optimisation and Control with Applications to Industrial Problems*, 19-21 September 2001, Athens, Greece.
56. Aydin, M.E.,Öztemel, E., (1998), "*Q-III:* Generalization of experiences for reinforcement learning", ”: *In Proc. of 7th Turkish artificial Intelligence and Neural Networks Symposium, Ed. by I.Cicekli,* 26-28 June 1997, Bilkent University, Ankara, Turkey.
57. Aydin, M.E.,Öztemel, E., (1998), " Dynamic job-shop scheduling using intelligent agents", *In Proc. of 2nd International Intelligent Manufacturing Systems Symposium, Ed. by G.Cagil and K. Turker,* 5-6 August 1998, Sakarya University, Adapazari, Turkey.
58. Öztemel, E., Aydin, M.E., (1997), “Learning in intelligent agents: *Q-I* learning algorithm”, In: *New Trends in Artificial Intelligence and Neural Networks, Ed: T. Çiftçibasi, M. Karaman, V. Atalay*, pp:200-206, EMO, Ankara.
59. Öztemel, E., Aydin, M.E.,(1997), “*Q-II*: An improved learning algorithm for intelligent agents”, In: *Proceedings of 11th European Simulation Multi-conference, Ed: A.R. Kaylan & A. Lehmann*, 1-4 June 1997, pp:275-279, Istanbul.
60. Aydin, M.E., Ozkan, Y,.(1996), " Identifying probability distribution of a data set using artificial neural networks**",** *In Proc. of 1rst International Intelligent Manufacturing Systems Symposium, Ed. by M. Ozbayrak, H.Taskin and E.Oztemel 29-30* May 1996, Sapanca, Adapazari, Turkey.(In Turkish)
61. Öztemel, E., Aydin, M.E., (1995), “A comparison between artificial neural networks and Taguchi method”: *In Proc. of 4th Turkish artificial Intelligence and Neural Networks Symposium, Ed. by H.A. Güvenir,* 26-28 June 1995, TÜBITAK-MAM, Gebze, Kocaeli. (In Turkish)

### *Other Conference Papers:*

1. Aydin, M.E., (2019), “Zeki etmenler takımları ve öğrenen sürüler”, *Mimar ve Mühendis*, 106, 44 – 49. (In Turkish)
2. Aydin, M.E., Koç, C., (1997), “ODUZMAN: An expert system prototype for selection of orthogonal arrays in Taguchi Method”,: *In Proc. of First Turkish Manufacturing Symposium, Ed. by G.Gencyilmaz and A. Toraman,* 11-12 Oct 1997, Istanbul, Turkey. (In Turkish)
3. Oztemel, E., Aydin, A.E., Aydin, M.E., (1997), “Forecasting daily gas consumption for city of Istanbul using artificial neural networks”,: *In Proc. of First Turkish Manufacturing Symposium, Ed. by G.Gencyilmaz and A. Toraman,* 11-12 Oct 1997, Istanbul, Turkey. (In Turkish)
4. Werner, J. C., Aydin, M. E., Fogarty, T. C., (2002), “Evolving genetic algorithms for job shop scheduling problems”, poster in ACDM’2002, University of Polymouth, UK.
5. Aydin, M. E.,Yigit, V., and Fogarty, T. C., (2002), “A Parallel Simulated Annealing Implementation for Uncapacitated Facility Location Problems”, In Books of Abstracts of ECCO XV, 30 May - 1 June 2002, Lugano, Switzerland. <http://www.idsia.ch/ecco2002/eccoXV-book.pdf>

### *Book Chapters:*

1. Comşa, I. S., Zhang, S., Aydin, M. E., Kuonen, P., Trestian, R., & Ghinea, G. (2019). Machine learning in Radio resource scheduling. In *Next-Generation Wireless Networks Meet Advanced Machine Learning Applications* (pp. 24-56). IGI Global.
2. Comşa, I. S., Zhang, S., Aydin, M. E., Kuonen, P., Trestian, R., & Ghinea, G. (2019). Guaranteeing user rates with reinforcement learning in 5G Radio access networks. In *Next-Generation Wireless Networks Meet Advanced Machine Learning Applications* (pp. 163-198). IGI Global.
3. Aydin, M. E., (2018), Etmen tabanlı endüstriyel sistemler, *Çağdaş Endüstri Mühendisliği*, Ed: Öztemel, E., Papatya Yayınları, Istanbul.
4. Kwan, R., Aydin, M.E. and Luang, C. (2012), "Simulated Annealing and Multiuser scheduling in Mobile Communication Networks" in Simulated Annealing / Book 1", ISBN 979-953-307-786-3.
5. Bessis, N., Assimakopoulou, E., Aydin, M.E., and Xhafa, F., (2011), “Utilizing Next Generation Emerging Technologies for enabling Collective Computational Intelligence in Disaster Management”, *in Next Generation Data Technologies for Collective Computational Intelligence, book series in "Studies in Computational Intelligence", Ed: N. BESSIS and F. XHAFA, Springer .*
6. Aydin,. M.E., and Şevkli, M., (2008), “Sequential and parallel variable neighbourhood search for job shop scheduling problems”, *Studies in Computational Intelligence (SCI), Metaheuristics for Scheduling in Industrial and manufacturing Applications*, *Ed:**F. Xhafa and A. Abraham,*  128, 125-144, Springer, 2008.
7. Aydin, M.E and Yigit, V., (2004), “Parallel simulated annealing”, a chapter in *Parallel Meta-Heuristics Ed: E. Alba*, Wiley 2005.
8. Yigit, V., Aydin, M.E.,  and Turkbey, O., (2004), "Evolutionary simulated annealing algorithms for uncapacitated facility location problems", *Adaptive Computing in Design and Manufacture VI, Ed:**I.C. Parmee,* pp. 185-196. Springer,2004
9. Öztemel, E., and Aydin, M.E., (1997a), “Learning in intelligent agents: *Q-I* learning algorithm”, In: *New Trends in Artificial Intelligence and Neural Networks, Ed: T. Çiftçibasi, M. Karaman, V. Atalay*, pp:200-206, EMO, Ankara.

*Editorials:*

1. Chan, K.Y., Aydin, M.E., Seker, H., Palade, V., and Hong, T.-P., “Editorial Message: Special Issue on Efficient Fuzzy Systems for Mining Large Scale, Imprecise, Uncertain and Vague Data”, *International Journal of Fuzzy Systems,* 20(4), April 2018.
2. Aydin, M.E., (2013), “Agentification of individuals: A multi-agent approach to Metaheuristics”, *Journal of Computer Science and System Biology*., 6:e105. doi: 10.4172/jcsb.1000e105.
3. Dereli, T., and Aydin, M.E., (2009), “Editorial on Special Issue on Emergent Computing in Service Management”, *European Journal of Industrial Engineering*, 3(4), December 2009.
4. Aydin, M.E., Ozbayrak, M., and Fogarty, T.C., (2006), “Editorial on the Special Issue on Advances in Evolutionary Computation for Design and Manufacturing Problems”, *International Journal of Production Research*, 44(22), November 2006.

### *Technical Reports:*

* 1. Aydin, M.E.., Brown, K., (1999), “An empirical investigation of A-Teams for combinatorial optimisation problems ", Technical Report AUCS/TR9908, University of Aberdeen, Dept. of Computing Science, Scotland, UK.
  2. Aydin, M.E.., Fogarty, T.C., (2003), “Distributed scheduling using DREAM software", Technical Report SCISM03-10, London South Bank University, BCIM, London, UK.

### *Book Reviews:*

1. Aydin, M.E..,(2004), A review on “Multiple Criteria and Multiple Constraint Levels Linear Programming, by Y. Shi, World Scientific, 2003, 540 pp.”, *Journal of The Operational Research Society*, 55(5), 557-558.
2. Aydin, M.E., (2006) “Dynamic programming in economics by C. Leven, Springer*”, Journal of The Operational Research Society*, 57(3): 329-330 MAR 2006
3. Aydin , M.E., (2006), “Analysis and algorithms for service parts supply chains by John A. Muckstadt, Springer", *Journal of The Operational Research Society*, 57(10): 1259-1259 OCT 2006.
4. Aydin , M.E., (2010), “Online stochastic combinatorial optimization” by P. Van Hentenryck and R. Bent, MIT", Journal of The Operational Research Society, 61(9): 1435.
5. Many more in ACM Computing Reviews since 2016.