



Knowledge Transfer and Service

He has been a member of Committees of over 60 conferences, and Chair of about 10 conferences including Program Chair of 6 recently held International conferences. He is currently an associate editor of 5 journals. He has been one of three members representing Australia in the governing board of the Asian Pacific Neural Network Assembly (APNNA) (1999-2007) and chaired the Mechatronics task force of the IEEE Computational Intelligence Society (2004-05). He is a member of Technical Committees on Bioinformatics and Bioengineering of IEEE CIS and Pattern Recognition in Bioinformatics of the Pattern Recognition Society. He is a Senior Member of IEEE. He has conducted three international consultancies for UNDP and was an expert technical adviser to the Australian government Department of Health and Ageing (2002-05). He is an International expert grant reader for ARC Mathematics and Computing panel. He has held various academic administrative positions such as Postgraduate adviser (2007), Open day Coordinator (1998-2003), Major Project Coordinator (1999-2002) and (2007-present) and participated in various faculty and departmental committees.

Recent activities (2008): Talks at UC Berkeley and JPL labs at Caltech (April/May 2008), Co-editor of the journal [Special Issue on Humanitarian Technology](#), Chair of conferences [IEEE-International Conference on Automation and Logistics'08](#), [The Eighth International Conference on Intelligent Systems Design and Applications](#) and advisory committee member of [International Conference on Bio-Science and Bio-Technology \(BSBT'08\)](#). Program Committee member of 8 conferences in 2008 including IEEE World Congress on Computational Intelligence and IEEE International Conference on Soft computing as Transdisciplinary Science.

Selected Publications

10. S. Maheshwararajah, S.K. Halgamuge and M. Premaratne, "Sensor Scheduling for Target Tracking by Sub-optimal Algorithms", IEEE Transactions on Vehicular Technology, (accepted in May 2008)
9. C.K. Chan, A.L. Hsu, S.K. Halgamuge and S.L. Tang, "Binning Sequences Using Very Sparse Labels Within A Metagenome", BMC Bioinformatics, 2008, 9:215, 28 April 2008. [DOWNLOAD PAPER](#)
8. M. Premaratne and S. K. Halgamuge, "Rigorous Analysis of Numerical Phase and Group Velocity Bounds in Yee's FDTD Grid", IEEE Microwave and Wireless Components Letters, Volume 17, Issue 8, Page(s):556 – 558, 2007. [DOWNLOAD PAPER](#)
7. *B. Chang, S. K. Halgamuge and S. Tang, "Analysis of SD sequences in completed microbial genomes: Non SD-led genes are as common as SD-led genes", Gene: An International Journal on Genes and Evolution, Elsevier, Vol 373, pp 90-99, 2006.
6. *A. Ratnaweera, S. K. Halgamuge and H. C. Watson, Self-Organizing Hierarchical Particle Swarm Optimizer with time varying acceleration coefficients, IEEE Transactions on Evolutionary Computation June 2004, IEEE Press. [DOWNLOAD PAPER](#)
5. A. Hsu and S. Tang and S. K. Halgamuge, An Unsupervised Hierarchical Dynamic Self-Organizing Approach to Class Discovery and Marker Gene Identification in Microarray Data, Bioinformatics, Oxford University Press, November 2003. [DOWNLOAD PAPER](#)
4. B. Chang and S. K. Halgamuge. Protein Motif Extraction with Neuro-Fuzzy Optimization. Bioinformatics, Oxford University Press, Vol 18, No 8, 2002.
3. *D. Alahakoon, S. K. Halgamuge and B. Srinivasan, "Dynamic Self Organizing Maps with Controlled Growth for Knowledge Discovery", IEEE Transactions on Neural Networks (Special Issue in Data Mining), 2000
2. S.K. Halgamuge, "Self Evolving Neural Networks for Rule Based Data Processing", IEEE Transactions on Signal Processing, Vol 45, No 11, pages 2766-2773, Nov. 1997
1. *S.K. Halgamuge and M. Glesner,, "Neural Networks in Designing Fuzzy Systems for Real World Applications", International Journal for Fuzzy Sets and Systems, Vol 65, No 1, pages 1-12, Elsevier, 1994.(Listed among the most cited \$2500\$ papers published in Engineering in the 1994-03 period by ISI Essential Science Indicators)



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