## **Publications**

## Journal Papers in Year 2010

- 1. WY Gu, V Venkatesh and C Xiang, "A Novel Allication of Self-Organizing Network for Facial Expression Recognition from Radial Encoded Contours", *Soft Computering*, Vol. 14, No. 2, pp. 113-122, January 2010.
- 2. B Yun, BM Chen, KY Lum and TH Lee, "Design and implementation of a leader-follower formation flight control system for unmanned helicopters", *Journal of Control Theory and Applications*, Vol. 8, No. 1, pp. 61-68, February 2010.
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- 4. JC Lv, KK Tan, Y Zhang and S Huang, "A Family of Fuzzy Learning Algorithms for Robust Principal Component Analysis Neural Networks", *IEEE Transactions on fuzzy systems*, Vol. 18, No. 1, pp. 217-226, February 2010.
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- CK Thum, C Du, BM Chen, EH Ong and KP Tan, "A unified control scheme for combined seeking and track-following of a hard disk drive servo system", *IEEE Transactions on Control Systems Technology*, Vol. 18, No. 2, pp. 294-306, March 2010.
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- 8. JH Ang, KC Tan and AA Mamun, "An Evolutionary memetic algorithm for rule extraction", *Expert Systems With Applications*, Vol. 37, No. 2, pp. 1302-1315, March 2010.
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- 13. XH Wu, SK Panda and JX Xu, "Design of a Plug-In Repetitive Control Scheme for Eliminating Supply-Side Current Harmonics of Three-Phase PWM Boost Rectifiers Under Generalized Supply Voltage Condition", *IEEE Transactions on Power Electronics*, Vol. 25, No. 7, pp.1800-1810, July 2010.
- 14. ZY Nie, QG Wang, W Min and H Yong, "Exact computation of loop gain margins of multivariable feedback systems", *Journal of Process Control*, Vol. 20, No. 6, pp.762-768, July 2010.
- 15. SC Lee, QG Wang and BN Le, "Stabilizing control for a class of delay unstable processes", *ISA Transactions*, Vol. 49, No. 3, pp. 318-325, July 2010.
- 16. KR Qin, C Xiang and SS Ge, "Generation of dynamic biochemical signals with a tube mixer: Effect of dispersion in an oscillatory flow", *Heat And Mass Transfer*, Vol. 46, No. 6, pp. 675-686, May 2010.
- 17. W Lan, CK Thum and BM Chen, "A hard disk drive servo system design using composite nonlinear feedback control with optimal nonlinear gain tuning methods", *IEEE Transactions on Industrial Electronics*, Vol. 57, No. 5, pp. 1735-1745, May 2010.
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- 32. B Ren, SS Ge, KP Tee and TH Lee, "Adaptive Neural Control for Output Feedback Nonlinear Systems Using a Barrier Lyapunov Function", *IEEE Transactions on Neural Networks*, Vol. 21, No. 8, pp. 1339-1345, August 2010.
- 33. M Wang, SS Ge and KS Hong, "Approximation-Based Adaptive Tracking Control of Pure-Feedback Nonlinear Systems with Multiple Unknown Time-Varying Delays", *IEEE Transactions on Neural Networks*, Vol. 21, No. 11, pp. 1804-1816, November 2010.
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## **Conference Papers in Year 2010**

- 1. J Yuan, KK Tan and TH Lee, "Development of an e-Guardian for the single elderly or the chronically-ill patients", *Proceedings of the 2010 International Conference on Communications and Mobile Computing*, pp. 378-382, China, 12-14 Apr 2010.
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- 5. M Nie and WW Tan, "Derivation of the Analytical Structure Of Symmetrical IT2 Fuzzy PD and PI Controllers", *Proceedings of the IEEE International Conference on Fuzzy Systems*, pp. 1096-1103, Spain, 18-23 Jul 2010.
- 6. JX Xu and X DENG, "Dynamic neural network based chemotaxis behaviors modeling of C.elegans", *Proceedings of 2010 IEEE World Congress on Computational Intelligence*, Spain, 18-23 Jul 2010.
- 7. SR Liyanage, JX Xu, CT Guan, KK Ang and TH Lee, "EEG signal separation for multi-class motor imagery using common spatial patterns based on joint approximate diagonalization", *Proceedings of 2010 IEEE World Congress on Computational Intelligence*, Spain, 18-23 Jul 2010.
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- 11. N Tan, H Lin and Z Ji, "New results on controllability of multi-agent systems". Proceedings of the 8<sup>th</sup> World Congress on Intelligent Control and Automation, China, 7-9 Jul 2010.
- 12. Z Ji, H Lin and TH Lee, "Downer and perron branches in interconnection topologies for coor dination and control of multi-agent networks", *Proceedings of the 8th World Congress on Intelligent Control and Automation*, China, 7-9 Jul 2010.
- 13. TW Chua, WW Tan, Z Wang and CS Chang, "Hybrid Time-Frequency Domain Analysis for Inverter-Fed Induction Motor Fault Detection", *IEEE International Symposium on Industrial Electronics*, Italy, 4-7 Jul 2010.
- 14. SK Phang, JJ Ong, RTC Yeo, BM Chen and TH Lee, "Autonomous mini-UAV for indoor flight with embedded on-board vision processing as navigation system", Proceedings of the IEEE R8 International Conference on Computational Technologies in Electrical and Electronics Engineering, pp. 722-727, Russia, 11 –15 Jul 2010.
- 15. F Lin, BM Chen, KY Lum and TH Lee, "A robust vision system on an unmanned helicopter for ground target seeking and following", *Proceedings of the 8th World Congress on Intelligent Control and Automation*, pp. 276-281, China, 6-9 Jul 2010.
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- 17. KK Tan and S Huang, "Problem and solution of designing an air bearing system", *Proceedings of the 2nd International Conference on Industrial and Information Systems*, pp. 212-215, China, 10-11 Jul 2010.
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- 23. JX Xu, Z Guo and TH Lee, "A synthesized integral sliding mode controller for an underactuated unicycle", *Proceedings of 10th IEEE VSS Workshop*, Mexico, 26-28 Jun 2010.
- 24. JX Xu and D Huang, "Surveillance for a simply connected region: a one-center disk-covering problem", *Proceedings of the 8th IEEE International Conference on Control and Automation*, China, 9-11 Jun 2010.
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- 26. S Sangit, SK Panda and JX Xu, "A real time control algorithm for a myoelectric glove for the rehabilitation of wrist and elbow of stroke patients", *Proceedings of the 8th IEEE International Conference on Control Theory and Applications*, China, 9-11 Jun 2010.
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- 33.Y Yang and H Lin, "Reachability analysis based model validation in systems biology ", *Proceedings of 2010 Conference on Cybernetics & Intelligent Systems*, Singapore, 28-30 Jun 2010.

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- 37. F Lin, BM Chen and TH Lee, "Vision aided motion estimation for unmanned helicopters in GPS denied environments", *Proceedings of the 2010 IEEE International Conference on Cybernetics & Intelligent Systems*, pp. 64-69, Singapore, 28-30 Jun 2010.
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