## [Curriculum Vitae]

• Name/ Position

Sheng-Ta Hsieh

Associate Professor Dean for Research and Development

• Photo



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• Teaching Courses

Digital Logic Design

Microprocessor

Computational Intelligence

Artificial Intelligence

Introduction to RFID

Embedded System

Certification of Telecommunication Outside Plant

• The Highest Education Degree

Ph.D., Dept. of E.E., National Dong Hwa University

• Research Area

Evolutionary Computation, Neural Network, Fuzzy System, Embedded System

Recent Publications

## **Journal Papers**

- 1. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "Intelligent healthcare system using an Arduino microcontroller and android-based smartphone," *Biomedical Research*, 28(22), pp. 9940-9946, Nov. 2017
- 2. <u>Sheng-Ta Hsieh</u>, Chun-Ling Lin\*, "A Beat-to-Beat Atrial Fibrillation Detecting System," Journal of Cardiovascular Diseases & Diagnosis, DOI: 10.4172/2329-9517.S2-001, Nov. 2017.
- 3. <u>Sheng-Ta Hsieh</u>, Chun-Ling Lin\*, Pen-Wen Su and Wei-De Li, "Real-Time Reservation and Ordering System," Applied Science and Management Research, pp.148-155, Sep. 2016.
- 4. <u>Sheng-Ta Hsieh</u>, Shi-Jim Yen, Chun-Ling Lin\*, Shih-Yuan Chiu and Tsan-Cheng Su, "Solving The Flexible Job Shop Problem using Multi-Objective Optimizer with Solution Characteristic Extraction," *Applied Mathematics & Information Sciences*, vol. 10, No. 5, pp. 1815-1830, Sep. 2016. (SCI, IF=1.232, Mathematics, Applied, Rank=53/251, Q1)
- 5. <u>Sheng-Ta Hsieh\*</u>, Shih-Yuan Chiu and Shi-Jim Yen, "Adaptive Search Range and Multi-Mutation Strategies for Differential Evolution," *Journal of Information Science and Engineering*, pp. 749-763, May. 2014. (SCI, IF=0.333, Computer Science, Information Systems, Rank=128/135, Q4)
- 6. <u>Sheng-Ta Hsieh\*</u>, Shih-Yuan Chiu and Shi-Jim Yen, "An Improved Multi-Objective Genetic Algorithm for Solving Multiobjective Problems," *Applied Mathematics & Information Sciences*, vol.7, no. 5, pp. 1933-1941, Sep. 2013. (SCI, IF=1.232, Mathematics, Applied, Rank=53/251, Q1)
- 7. Tsung-Ying Sun\*, Chan-Cheng Liu, Shang-Jeng Tsai, and <u>Sheng-Ta Hsieh</u> and Kan-Yuan Li, "Cluster Guide Particle Swarm Optimization (CGPSO) for Underdetermined Blind Source Separation with Advanced Conditions," *IEEE Trans. on Evolutionary Computation*, vol. 15, no. 6, pp. 798-811, Dec. 2011. (SCI, IF=5.545, Computer science, Theory & Methods, Rank=1/102, Q1)
- 8. Chan-Cheng Liu, Tsung-Ying Sun\*, Shang-Jeng Tsai, Yu-Hsiang Yu, and **Sheng-Ta Hsieh**, "Heuristic wavelet shrinkage for denoising," *Applied Soft Computing*, vol. 11, issue 1, pp. 256-264, Jan. 2011. (SCI, IF=2.679, Computer Science, Artificial Intelligence, Rank=20/121, Q1)
- 9. Shang-Jeng Tsai, Tsung-Ying Sun\*, Chan-Cheng Liu, <u>Sheng-Ta Hsieh</u>, Wun-Ci Wu and Shih-Yuan Chiu, "An Improved Multi-Objective Particle Swarm Optimizer for Multi-Objective Problems," *Expert Systems with Applications*, vol. 37, no. 8, pp. 5872-5886, Aug. 2010. (SCI, IF=1.965, Computer Science, Artificial Intelligence, Rank=30/121, Q1)
- 10. Sheng-Ta Hsieh\*, Shih-Yuan Chiu, Tsung-Ying Sun, and Shi-Jim Yen, "Balanced Guides Assignment for

- Multi-Objective Particle Swarm Optimizer," *Journal of Computational Information Systems* (JCIS), vol. 6, no. 7, pp. 2107-2118, Jul. 2010. (EI)
- 11. <u>Sheng-Ta Hsieh</u>, Tsung-Ying Sun\*, Chan-Cheng Liu, and Shang-Jeng Tsai, "Potential Offspring Production Strategies: An Improved Genetic Algorithm for Global Numerical Optimization," *Expert Systems with Applications*, vol. 36, no. 2, pp. 11088-11098, Oct. 2009. (SCI, IF=1.965, Computer Science, Artificial Intelligence, Rank=30/121, Q1)
- 12. Chan-Cheng Liu, Tsung-Ying Sun\*, Shang-Jeng Tsai, and <u>Sheng-Ta Hsieh</u> "Blind Source Separation with Dynamic Source Number Using Adaptive Neural Algorithm," *Expert Systems with Applications*, vol. 36, no. 4, pp. 8855-8861, Jul. 2009. (SCI, IF=1.965, Computer Science, Artificial Intelligence, Rank=30/121, Q1)
- 13. <u>Sheng-Ta Hsieh</u>, Tsung-Ying Sun\*, Chan-Cheng Liu, and Shang-Jeng Tsai, "Efficient Population Utilization Strategy for Particle Swarm Optimizer," *IEEE Trans. on System, Man and Cybernetics, Part B Cybernetics*, vol. 39, no. 2, pp. 444-456, Apr. 2009. (SCI, IF = 3.236, Computer science, artificial intelligence, Rank=12/114, Q1)
- 14. Tsung-Ying Sun\*, Chan-Cheng Liu, <u>Sheng-Ta Hsieh</u>, and Shang-Jeng Tsai, "Blind Separation with Unknown Number of Sources Based on Auto-trimmed Neural Network," *Neurocomputing*, vol. 71(12), pp. 2271-2280, Jun. 2008. (SCI, IF = 2.005, Computer Science, Artificial Intelligence, Rank=28/121, Q1)
- 15. <u>Sheng-Ta Hsieh</u>, Tsung-Ying Sun\*, Chun-Ling Lin, and Chan-Cheng Liu, "Effective Learning Rate Adjustment of Blind Source Separation on an Improved Particle Swarm Optimizer," *IEEE Trans. on Evolutionary Computation*, vol. 12, no. 2, pp. 242-251, Apr. 2008. (SCI, IF=5.545, Computer science, Theory & Methods, Rank=1/102, Q1)
- 16. <u>Sheng-Ta Hsieh</u>, Tsung-Ying Sun\*, Chan-Cheng Liu, and Cheng-Wei Lin, "An Improved Particle Swarm Optimization for Placement Constraints and Macrocell Overlap Removal," *Journal of Artificial Evolution and Applications, Special Issue on Particle Swarms: The Second Decade*, vol. 2008 (2008), Article ID 514879, 10 pages, Open Access Journal.

## **Book Chapter**

1. Tsung-Ying Sun\*, Chan-Cheng Liu, Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>, and Cheng-Sen Huang, "A Radial Basis Function Neural Network with Adaptive Structure via Particle Swarm Optimization," Chapter 26, Particle Swarm Optimization, Edited by Alexander Zemliak, I-Tech, pp. 423-436, Jan. 2009.

## **International Conference Papers**

- 1. <u>Sheng-Ta Hsieh</u>, Chun-Ling Lin and Hao-Wen Cheng, "Adaptive Artificial Bee Colony for Numerical Optimization," in *proc*. of The Sixth International Symposium on Computing and Networking (CANDAR'18), pp. 174-177, Hida Takayama, Japan, November 27-30, 2018.
- 2. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin, "Detection and parameter estimation of R peaks in ECG signal using optimization algorithm," in *proc*. of The Sixth International Symposium on Computing and Networking (CANDAR'18), pp. 170-173, Hida Takayama, Japan, November 27-30, 2018.

- 3. Yi-Xiang Chen, <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "The electrocardiogram interpretation system in homecare," in *proc*. of 4th IEEE International Conference on Applied System Innovation 2018 (IEEE ICASI 2018), pp. 1167-1170, Chiba, Tokyo, Apr. 13-14, 2018.
- 4. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "Innovative R peak detecting algorithm using enhanced artificial bee colony" in *proc*. of 4th IEEE International Conference on Applied System Innovation 2018 (IEEE ICASI 2018), pp. 570-573, Chiba, Tokyo, Apr. 13-14, 2018.
- 5. <u>Sheng-Ta Hsieh\*</u>, Hao-Wen Cheng, Chun-Ling Lin and Tsung-Ying Sun, "Biologically Adaptive Artificial Bee Colony for Numerical Optimization," in *proc*. of The Third International Symposium on Computing and Networking (CANDAR 2017), pp. 187-193, Aomori, Japan, Nov. 19-22, 2017.
- 6. Chun-Ling Lin, <u>Sheng-Ta Hsieh\*</u> and Shih-Yuan Chiu, "Improved Differential Evolution with Searching Pioneer for Solving Multi-modal Optimization Problems," in *proc*. of The Third International Symposium on Computing and Networking (CANDAR 2017), pp. 101-105, Aomori, Japan, Nov. 19-22, 2017.
- 7. <u>Sheng-Ta Hsieh</u>, Jhan-Fong Yu, Chun-Ling Lin, "An Intelligent Fall Detection System Using Wearable Accelerometers and Android based Smartphone," in *proc*. of 2017 International Conference on Smart Science (ICSS 2017), Huis Ten Bosch, Japan, Apr. 6-10, 2017.
- 8. <u>Sheng-Ta Hsieh\*</u> and Chun-Ling Lin, "Improved Differential Evolution with Mutual Learning Strategy for Solving Numerical Optimization Problems," in *proc*. of 2017 International Conference on Smart Science (ICSS 2017), Huis Ten Bosch, Japan, Apr. 6-10, 2017.
- 9. Sheng-Ta Hsieh and Chun-Ling Lin\*, "Multi-Objective Artificial Bee Colony with Multi-Movement Strategies for Solving Multi-objective Optimization Problems," in *proc.* of 2016 Asia Pacific Industrial Engineering and. Management System Conference (APIEMS 2016), pp.1-6, Taipei City, Taiwan, Dec. 7-10, 2016.
- 10. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "An Improved Artificial Bee Colony for Solving Multi-objective Optimization Problems," in *proc*. of 2016 International Conference on Multimedia Systems and Signal Processing (ICMSSP), pp. 56-59, New Taipei City, Taiwan, Sep. 3-5, 2016.
- 11. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "An Intelligent Diagnosis Flu System based on Adaptive Neuro-Fuzzy Classifier," in *proc*. of The Third International Symposium on Computing and Networking (CANDAR 2015), pp. 547-550, Sapporo, Japan, Dec. 8-11, 2015.
- 12. Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>\* and Shih-Yuan Chiu, "Efficient Exploration Strategies for Artificial Bee Colony," in *proc*. of The Third International Symposium on Computing and Networking (CANDAR 2015), pp. 309-313, Sapporo, Japan, Dec. 8-11, 2015.
- 13. <u>Sheng-Ta Hsieh</u>\*, Chun-Ling Lin and Shih-Yuan Chiu, "Artificial Bee Colony with Enhanced Food Source Search Strategies," in *proc*. of International Conference on Applied System Innovation (ICASI 2015), Osaka, Japan, May 22-27, 2015.
- 14. Chun-Ling Lin, Huang-Lyu Wu and <u>Sheng-Ta Hsieh</u>\*, "Competition based Differential Evolution for Global Numerical Optimization," in *proc*. of International Conference on Applied System Innovation (ICASI 2015), Osaka, Japan, May 22-27, 2015.
- 15. <u>Sheng-Ta Hsieh</u> and Chun-Ling Lin\*, "Work-In-Progress: An intelligent diagnosis influenza system based on adaptive neuro-fuzzy inference system," in *proc*. of 1st International Conference on Industrial Networks and Intelligent Systems (INISCom 2015), pp. 177-180, Tokyo, Japan, Mar. 2-4, 2015.

- 16. Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>\* and Shih-Yuan Chiu, "Work-In-Progress: Adaptive Population Artificial Bee Colony for Numerical Optimization," in *proc*. of 1st International Conference on Industrial Networks and Intelligent Systems (INISCom 2015), pp. 168-171, Tokyo, Japan, Mar. 2-4, 2015.
- 17. Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>\*, Huang-Lyu Wu and Tse Su, "Robust Differential Evolution for solving Numerical Optimization Problems," in *proc*. of 1st International Conference on Industrial Networks and Intelligent Systems (INISCom 2015), pp. 122-125, Tokyo, Japan, Mar. 2-4, 2015.
- 18. <u>Sheng-Ta Hsieh</u>\*, Chun-Ling Lin and Shih-Yuan Chiu, "Adaptive mutation strategies and population for Differential Evolution," in *proc*. of International Symposium on Artificial and Robotics.(AROB 19th '14), pp. 854-858, Beppu, Oita, Japan, Jan. 22-24, 2014.
- 19. Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>\* and Jhih-Sian Chen, "Artificial Bee Colony Algorithm with Dimension Manager for Global Numerical Optimization," in *proc*. of International Symposium on Artificial and Robotics.(AROB 19th '14), pp. 867-871, Beppu, Oita, Japan, Jan. 22-24, 2014.
- 20. <u>Sheng-Ta Hsieh</u>\*, Huang-Lyu Wu and Tse Su, "Dual Mutation Strategies and Dual Crossover Strategies for Differential Evolution," in *Proc.* of 4th International Workshop on Advances in Networking and Computing, pp. 577-581, Matsuyama, Japan, Dec. 4-6, 2013.
- 21. <u>Sheng-Ta Hsieh</u>\*, Tse Su and Huang-Lyu Wu "An Improved Differential Evolution with Efficient Parameters Adjustment," in *Proc.* of 4th International Workshop on Advances in Networking and Computing, pp. 627-629, Matsuyama, Japan, Dec. 4-6, 2013.
- 22. Chun-Ling Lin, <u>Sheng-Ta Hsieh</u>\* and You-Jhong Hu, "Fuzzy Neural Network-Based Influenza Diagnostic System," in *Proc.* of 4th International Workshop on Advances in Networking and Computing, pp. 633-635, Matsuyama, Japan, Dec. 4-6, 2013.
- 23. <u>Sheng-Ta Hsieh</u>\* and, Bo-Han, "Competition-based Particle Swarm Optimizer for solving Numerical Optimization Problems," in *Proc.* of International Symposium on Artificial and Robotics.(AROB 18<sup>th</sup> '13), pp. 608-611, Daejeon, Korea, Jan. 30-Feb.1, 2013.
- 24. <u>Sheng-Ta Hsieh</u>\*, Huang-Lyu Wu and Tse Su, "Elitist Differential Evolution for solving Numerical Optimization Problems," in *Proc.* of International Symposium on Artificial and Robotics.(AROB 18<sup>th</sup> '13), pp. 612-615, Daejeon, Korea, Jan. 30-Feb.1, 2013.
- 25. <u>Sheng-Ta Hsieh</u>\* and Jhih-Sian Chen, "Artificial Bee Colony Algorithm with Crossover Strategy for Global Numerical Optimization," in *Proc.* of International Symposium on Artificial and Robotics.(AROB 18<sup>th</sup> '13), pp. 616-619, Daejeon, Korea, Jan. 30-Feb.1, 2013.
- 26. Sheng-Ta Hsieh\*, Shih-Yuan Chiu and Shi-Jim Yen, "Adoptive Population Differential Evolution with Local Search for Solving Large Scale Global Optimization," in *Proc.* of The 2012 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2012), pp. 1090-1094, COEX, Seoul, Korea, Oct. 14-17, 2012.
- 27. Sheng-Ta Hsieh\*, Chih-Dao Chen, Jun-Horng Chen, Chin-Lun Lai and Yu-Long Syu, "An Expert System Application for Respiratory Infection Diagnostic," in *Proc.* of The 9th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2012), pp. 673-678, Fukuoka, Japan, Sep. 4-7, 2012.
- 28. Teng-Hui Tseng, Chin-Lun Lai\*, Sheng-Ta Hsieh, Jun-Horng Chen, "An intelligent accessing control system based on human intention analysis," in *Proc.* of The 9th IEEE International Conference on

- Ubiquitous Intelligence and Computing (UIC 2012), pp. 337-347, Fukuoka, Japan, Sep. 4-7, 2012.
- 29. <u>Jun-Horng Chen</u>\*, Teng-Hui Tseng, Chin-Lun Lai, Sheng-Ta Hsieh, "An intelligent virtual fence security system for the detection of people invading," in *Proc.* of The 9th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2012), pp. 786-791, Fukuoka, Japan, Sep. 4-7, 2012.
- 30. <u>Sheng-Ta Hsieh</u>\*, Shih-Yuan Chiu and Shi-Jim Yen, "An Improved Differential Evolution for solving Large Scale Global Optimization," in *Proc.* of International Symposium on Artificial and Robotics.(AROB 17<sup>th</sup> '12), pp. 1169-1170, Beppu, Oita, Japan, Jan. 19-21, 2012.
- 31. Shi-Jim Yen, Shih-Yuan Chiu and Sheng-Ta Hsieh\*, "Genetic Algorithm with Cross Paths Detection for Solving Traveling Salesman Problems," in *Proc.* of International Symposium on Artificial and Robotics. (AROB 17<sup>th</sup> '12), pp. 1155-1156, Beppu, Oita, Japan, Jan. 19-21, 2012.
- 32. <u>Sheng-Ta Hsieh</u>\*, Shih-Yuan Chiu, and Shi-Jim Yen, "Sharing Mutation Genetic Algorithm for Solving Multi-objective Optimization Problems," in *Proc. of 2011 IEEE Congress on Evolutionary Computation* (CEC 2011), pp. 1833-1839, New Orleans, USA, Jun. 5-8, 2011. (NSC 99-2221-E-161-008)
- 33. <u>Sheng-Ta Hsieh</u>\*, "RFID medical information system: A system implementation on MSP430 platform," in *Proc. of 2011 International Conference on Consumer Electronics, Communications and Networks* (CECNet), pp. 1-4, Xianning, China, Apr. 16-18, 2011.
- 34. <u>Sheng-Ta Hsieh</u>\*, Shih-Yuan Chiu, and Shi-Jim Yen, "An improved Multi-Objective Genetic Algorithm for Solving Flexible Job Shop Problem," in *Proc. of The IET International Conference on Frontier Computing-Theory, Technology and Applications*, pp. 427-431, Taichung, Taiwan, Aug. 4-6, 2010.
- 35. Chan-Cheng Liu, <u>Sheng-Ta Hsieh</u>\*, and Wei-Chih Huang, "Evolutionary Noise Reduction Based on Correlation Evaluation," in *Proc. of The IET International Conference on Frontier Computing-Theory, Technology and Applications*, pp. 411-415, Taichung, Taiwan, Aug. 4-6, 2010.
- 36. <u>Tsung-Ying Sun</u>\*, Chan-Cheng Liu, Yu-Peng Jheng, Jyun-Hong Jheng, and Sheng-Ta Hsieh, "Blind image deconvolution via particle swarm optimization with entropy evaluation," in *Proc. of International Conference on Intelligent Systems Design and Applications* (ISDA), pp. 265-270, Kaohsiung City, Taiwan, Nov. 26-28, 2008.
- 37. <u>Tsung-Ying Sun</u>\*, Chan-Cheng Liu, Tsung-Ying Tsai, Jyun-Hong Jheng, and Sheng-Ta Hsieh, "Threshold exploration via particle swarm optimizer at profitable wavelet decomposition for noise reduction," in *Proc. of IEEE Conference on System, Man, and Cybernetics* (IEEE SMC 2008), pp. 2652-2657, Singapore, Oct. 12-15, 2008.
- 38. <u>Tsung-Ying Sun</u>\*, Wun-Ci Wu, Shang-Jeng Tsai, Chan-Cheng Liu, Shih-Yuan Chiu, and Sheng-Ta Hsieh, "Particle swarm optimizer for multi-objective problems based on proportional distribution and cross-over operation," in *Proc. of IEEE Conference on System, Man, and Cybernetics* (IEEE SMC 2008), pp. 2658-2663, Singapore, Oct. 12-15, 2008.
- 39. <u>Sheng-Ta Hsieh</u>\*, Tsung-Ying Sun, Chan-Cheng Liu, and Chun-Ling Lin, "Sharing Evolution Genetic Algorithm for Global Numerical Optimization," in *Proc. of 2008 IEEE Conference on Soft Computing in Industrial Applications* (SMCia/08), pp. 326-331, Muroran Hokkaido, Japan, Jun. 25-28, 2008.
- 40. Tsung-Ying Sun\*, Chan-Cheng Liu, Sheng-Ta Hsieh, Tsung-Ying Tsai, and Jyun-Hong Jheng, "Optimal

- Determination of Wavelet Threshold and Decomposition Level via Heuristic Learning for Noise Reduction," in *Proc. of* 2008 IEEE Conference on Soft Computing in Industrial Applications (SMCia/08), pp. 405-410, Muroran Hokkaido, Japan, Jun. 25-28, 2008.
- 41. <u>Sheng-Ta Hsieh</u>\*, Tsung-Ying Sun, Chan-Cheng Liu, and Shang-Jeng Tsai, "Solving Large Scale Global Optimization Using Improved Particle Swarm Optimizer," in *Proc. of 2008 IEEE Congress on Evolutionary Computation* (IEEE CEC 2008), pp. 1777-1784, Hong Kong, June 1-6, 2008.
- 42. <u>Tsung-Ying Sun</u>\*, Chan-Cheng Liu, Tsung-Ying Tsai, and Sheng-Ta Hsieh, "Adequate Determination of a Band of Wavelet Threshold for Noise Cancellation Using Particle Swarm Optimization," in *Proc. of 2008 IEEE Congress on Evolutionary Computation* (IEEE CEC 2008), pp. 1168-1175, Hong Kong, June 1-6, 2008.
- 43. Shih-Yuan Chiu, Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, and Cheng-Wei Lin, "Cross-Searching Strategy for Multi-objective Particle Swarm Optimization," in *Proc. of IEEE Congress on Evolutionary Computation 2007* (CEC 2007), pp. 3135-3141, Singapore, Sep. 25-28, 2007.
- 44. Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, Shih-Yuan Chiu, and Pe-Dan Chang, "Multi-Objective Particle Swarm Optimization for Embedded Systems Design," in *Proc. of 8<sup>th</sup> International Symposium on advanced Intelligent Systems* (ISIS 2007), pp. 217-220, Sokcho City, Korea, Sep. 5-8, 2007.
- 45. Chan-Cheng Liu, Kan-Yuan Li, <u>Tsung-Ying Sun</u>\*, Sheng-Ta Hsieh, and Shang-Jeng Tsai, "A Robust Blind Sparse Source Separation Algorithm Using Genetic Algorithm to Identify Mixing Matrix," in *Proc. of IASTED International Conference on Signal Processing, Pattern Recognition and Applications* (SPPRA 2007), pp. 289-294, Innsbruck, Austria, Feb. 14-16, 2007.
- 46. Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, Jian-Ming Chen, Chan-Cheng Liu, and Shang-Jeng Tsai, "Genetic Algorithm: A Seesaw Method for Generating Offspring," in *Proc. of IASTED International Conference on Modeling, Identification and Control* (MIC 2007), pp. 477-481, Innsbruck, Austria, Feb. 12-14, 2007.
- 47. Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, Shih-Yuan Chiu, Chan-Cheng Liu, and Cheng-Wei Lin, "Cluster Based Solution Exploration Strategy for Multi-objective Particle Swarm Optimization," in *Proc. of IASTED International Conference on Artificial Intelligence and Applications* (AIA 2007), pp. 295-300, Innsbruck, Austria, Feb. 12-14, 2007.
- 48. Chan-Cheng Liu, <u>Tsung-Ying Sun</u>\*, Kan-Yuan Li, Sheng-Ta Hsieh, and Shang-Jeng Tsai, "Blind Sparse Source Separation Using Cluster Particle Swarm Optimization Technique," in *Proc. of IASTED International Conference on Artificial Intelligence and Applications* (AIA 2007), pp. 82-87, Innsbruck, Austria, Feb. 12-14, 2007.
- 49. Chan-Cheng Liu, <u>Tsung-Ying Sun</u>\*, Sheng-Ta Hsieh, Chun-Ling Lin, and Kan-Yuan Lee "A Hybrid Blind Signal Separation Algorithm: Particle Swarm Optimization on Feed-forward Neural Network," in *Proc.* of 13<sup>th</sup> International Conference on Neural Information Processing (ICONIP2006), Lecture Notes in Computer Science, LNCS 4232, pp. 1078-1087, Springer-Verlag, Oct. 2006.
- 50. Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, Cheng-Wei Lin, and Chun-Ling Lin "Placement Constraints and Macrocell Overlap Removal Using Particle Swarm Optimization," in *Proc. of 5th International Workshop on Ant Colony Optimization and Swarm Intelligence, Lecture Notes in Computer Science*, LNCS 4150, pp. 235-246, Springer-Verlag, Sep. 2006.

- 51. Chun-Ling Lin, Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, and Chan-Cheng Liu, "Cluster Distance Factor Searching by Particle Swarm Optimization for Self-Growing Radial Basis Function Neural Network," in *Proc. of 2006 International Joint Conference on Neural Networks* (IJCNN 2006), pp. 9879-9884, Vancouver, Canada, July 16-21, 2006.
- 52. Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, Jian-Ming Chen, and Cheng-Wei Lin "Efficient Task Scheduling for Heterogeneous Multiprocessors Using Particle Swarm Optimization," in *Proc. of 2006 IEEE Swarm Intelligence Symposium* (SIS'06), Indianapolis, USA, May 12-14, 2006.
- 53. <u>Tsung-Ying Sun</u>\*, Sheng-Ta Hsieh, Hsiang-Min Wang, and Cheng-Wei Lin, "Floorplanning Based on Particle Swarm Optimization," in *Proc. of IEEE Computer Society Annual Symposium on VLSI* (ISVLSI 2006), pp. 7-11, Karlsruhe, Germany, Mar. 2-3, 2006.
- 54. Chun-Ling Lin, Sheng-Ta Hsieh, <u>Tsung-Ying Sun</u>\*, and Chan-Cheng Liu, "PSO-Based Learning Rate Adjustment for Blind Source Separation," in *Proc. of 2005 International Symposium on Intelligent Signal Processing and Communication Systems* (ISPAC 2005), pp. 181-184, Hong Kong, Dec. 13-16, 2005.
- 55. <u>Tsung-Ying Sun</u>\*, Sheng-Ta Hsieh, and Cheng-Wei Lin, "Particle swarm optimization Incorporated with disturbance for improving the efficiency of macrocell overlap removal and placement," in *Proc. of The 2005 International Conference on Artificial Intelligence* (ICAl'05), pp. 122-125, Las Vegas, Nevada, U.S.A., June 27-30, 2005.
- 56. Sheng-Ta Hsieh, Cheng-Wei Lin, and <u>Tsung-Ying Sun</u>\*, "Particle Swarm Optimization for Macrocell Overlap Removal and Placement," in *Proc. of 2005 IEEE Swarm Intelligence Symposium* (SIS'05), pp. 177-180, Pasadena, CA, U.S.A., June 8-10, 2005.