

CV

Name: Sarawut SUJITJORN

Address: School of Electrical Engineering
Suranaree University of Technology
111 University Avenue
Muang District, Nakhon Ratchasima
Thailand 30000

Phone: +66-44-224-400

Fax: +66-44-224-601

Email: sarawut@sut.ac.th

Research Interests: Linear and nonlinear control, modelling and identification, meta-heuristics, evolutionary algorithms, signal and system applications

Present Occupation: Professor of Electrical Engineering
Suranaree University of Technology, Thailand

Education:

BSc(EE), 1st Class Honours, Royal Thai Air Force Academy, 1984

PhD(EE), University of Birmingham (UK), 1987

Patents:

1. An Umbrella-Shape Mirror with a Rear Reflector
2. The Image Calibration Method for a Set of Camera and the Umbrella-Shape Mirror with a Rear Reflector
3. Designs of Inductors, Capacitors, and IGBTs' Switching Frequencies for an Active Power Filter with Hysteresis Current Control
4. A Rotor Slot Shape to Reduce Vibration in an Induction Motor
5. An Electronic Apparatus for Calibration of Kim (Butterfly Harp)
6. A Chopping Blade and the Forming Process of the Chopping Blade
7. A Bunch of Multiple Spiral Blade Sets
8. An Adjustable Angle Blade Sleeve to Hold the Chopping Blade and the Chopping Blade Sets
9. A Supporting Blade
10. The Carving Blade Set
11. A Carving Blade
12. The Chopping Machine for Crops
13. A Battery Driver Lawnmower Capable of Horizontally and Vertically Cutting
14. A Dimmable Single-Stage Electronic Ballast for a High-Pressure Sodium Lamp

Some Selected Publications:

- J. Kluabwang and S. Sujitjorn, "Tabu Search: Its Modified Forms and Management Agent", *Recent Patents on Electrical Engineering*, Vol. 2, No. 2, 135-145, 2009.
- W. NgernBaht, K-L. Areerak and S. Sujitjorn, "Resonance and Friction Compensations in a Micro Hard Drive", *WSEAS Trans. on Information Science and Applications*, Vol. 6,

- No. 5, 736-745, 2009.
- J. Kluabwang, D. Puangdownreong and S. Sujitjorn, "Performance Assessment of Search Management Agent under Asymmetrical Problems and Control Design Applications", *WSEAS Trans. on Computers*, Vol. 8, No. 4, 691-704, 2009.
- J. Kluabwang, D. Puangdownreong and S. Sujitjorn, "Management Agent for Search Algorithms with Surface Optimization Applications", *WSEAS Trans. on Computers*, Vol. 7, No. 6, 791-803, 2008.
- D. Puangdownreong and S. Sujitjorn, "Obtaining an Optimum PID-Controller via Adaptive Tabu Search", *Lecture Notes in Computer Science*, Vol. 4431-Part II, Springer-Verlag, April, 747-756, 2007.
- S. Sujitjorn, K-L. Areerak and T. Kulworawanichpong, "The DQ Axis with Fourier (DQF) Method for Harmonic Identification", *IEEE Trans. on Power Delivery*, Vol. 22, No. 1, 737-739, Jan. 2007.
- S. Sujitjorn, T. Kulworawanichpong, D. Puangdownreong and K-N. Areerak, "Adaptive Tabu Search and Applications in Engineering Design", In: *Integrated Intelligent Systems for Engineering Design* (X. F. Zha and R. J. Howlett ed.), IOS Press, Netherlands, 2006 (invited book chapter).
- S. Sujitjorn and S. Khawan-on, "Learning Control Via Neuro-Tabu-Fuzzy Controller", *Lecture Notes in Artificial Intelligence*, Springer-Verlag Heidelberg, Vol. 4251, 833-840, 2006. (online)
- W. Sangtungton and S. Sujitjorn, "Analysis of Transient-State Stability of a Sliding-Mode Speed Observer", *WSEAS Trans. on Systems*, Vol. 5, Iss. 6, 1248-1256, 2006.
- D. Puangdownreong and S. Sujitjorn, "Image Approach to System Identification", *WSEAS Trans. on Systems*, Vol. 5, Iss. 5, 930-938, 2006.
- S. Raweekul, T. Kulworawanichpong and S. Sujitjorn, "Parallel-Connected Single-Phase Induction Motors: Modelling and Simulation", *WSEAS Trans. on Circuits and Systems*, Vol. 5, Iss. 3, 377-384, 2006.
- D. Puangdownreong, C. U-Thaiwasin and S. Sujitjorn, "Optimized Performance of a 2-Mass Rotary System Using Adaptive Tabu Search", *WSEAS Trans. on Circuits and Systems*, Vol. 5, Iss. 3, 339-345, 2006.
- P. Pao-la-or, T. Kulworawanichpong, S. Sujitjorn and S. Peaiyoung, "Distributions of Flux and Electromagnetic Force in Induction Motors: A Finite Element Approach", *WSEAS Trans. on Systems*, Vol. 5, Iss. 3, 617-624, 2006.
- W. Sangtungton and S. Sujitjorn, "Adaptive Sliding-Mode Speed-Torque Observer", *WSEAS Trans. on Systems*, Vol. 5, Iss. 3, 458-466, 2006.
- D. Puangdownreong, T. Kulworawanichpong and S. Sujitjorn, "Finite Convergence and Performance Evaluation of Adaptive Tabu Search", *Lecture Notes in Artificial Intelligence*, Springer-Verlag Heidelberg, Vol. 3215, 710-717, 2004. (online)
- S. Sujitjorn and K-L. Areerak, "Numerical Approach to Loss Minimization in an Induction Motor", *Applied Energy*, Vol. 79, No. 1, 87-96, 2004.
- D. Puangdownreong, S. Sujitjorn and T. Kulworawanichpong, "Convergence Analysis of Adaptive Tabu Search", *ScienceAsia*, Vol. 30, No. 2, 183-190, 2004.
- T. Kulworawanichpong and S. Sujitjorn, "Optimal Power Flow Using Tabu Search", *Power Engineering Letters, IEEE Power Engineering Review*, 37-40, June 2002.