

CURRICULUM VITAE FOR DR SUH-WEN CHIOU

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Education:

BA in National Cheng-Kung University, Taiwan (1990).

MBA in National Cheng-Kung University, Taiwan (1992).

PhD in Transport Studies, University College London, University of London, UK. (1998)

Experiences:

Professor of Information Management at National Dong Hwa University since 2/2008

Associate Professor of Information Management at National Dong Hwa University
(2004-8/2008-1)

Assistant Professor of Information Management at National Dong Hwa University
(2002-7/2004)

Assistant professor in MIS at Tatung University (1999-2002)

Post-doc in Computer Science, Kings College London, UK (1998-1999)

Research interests: Transportation Network Design, Management Information System, OOP, Global Logistics & Supply Chain Management, Network Optimization, Bilevel Programming & its Applications at Information Management, Transportation Resource Management, Network Algorithm Design & Implementations, Mathematical Programming and Operations Research.

Honors:

1. TOP 100 Scientists 2008 (International Biographical Centre, Cambridge, England, UK)
2. 2000 outstanding intellectuals of the 21th century 2008/2009, 2009/2010 (International Biographical Centre, Cambridge, England, UK)
3. The international Plato Award for educational achievement-iconic achievers; (International Biographical Centre, Cambridge, England, UK), 2009.
4. Top 100 educators, 2009 (International Biographical Centre, Cambridge, England,

UK)

5. Marquis Who's Who in Science and Engineering- 2008/2009, 2011/2012 (USA)
6. Marquis Who's Who in America (2009) (63rd)
7. Marquis Who's Who in the World (2009, 2010, 2011) (26th, 27th, 28th)
8. Leading Scientists of the World 2008 (International Biographical Centre, Cambridge, England, UK)
9. International Scientist of the World 2008 (International Biographical Centre, Cambridge, England, UK)

Academic service:

International Journal member of Editorial Board:

The Open Management Journal; ISSN: 1874-9488

The Open Operational Research Journal; ISSN: 1874-2432

The Open Transportation Journal; ISSN: 1874-4478

Referee for international journals, referred conference papers, NSC projects & MBA external examiners:

1999-2000 Transportation Science (SCI & SSCI)

2000-2002 International Transactions in Operational Research (ITOR)

2003-2004 ITS Journal

2003-2004 Transportation Journal (SCI)

2003-2007 National Science Council.

2003-2004 TRB 2004 Annual meeting.

2003-2004 The 8th International conference on the applications of advanced technologies in transportation engineering

2003-2004 MBA external examiner for Graduate school for Transportation, Communication & Management at NCKU, Taiwan.

2004-2005 Asia Pacific Journal of Operational Research

2004-2005 Transportation Research Part B (SCI & SSCI)

2004-2006 Journal of Advanced Transportation (SCI)

2004-2005 Transportation Research Board 2005 Annual meeting

2004-2005 Journal of Transportation Systems Engineering and Information Technology

2004-2010 European Journal of Operational Research (SCI)

2004-2010 Information Sciences (SCI)

2004-2006 Journal of Advanced Transportation (SCI)

2005-2006 Journal of the Eastern Asia Society for Transportation Studies

2005-2006 External project investigator for City University of Hong Kong Research Committee

2006-2010 Applied Mathematical Modeling (SCI)
 2005-2007 IEEE Transactions on Intelligent Transportation Systems (SCI)
 2006-2007 International Journal of Operations Research (IJOR)
 2006-2007 the 9th International IEEE Conference on Intelligent Transportation Systems
 2007-2008 the 10th International IEEE Conference on Intelligent Transportation Systems
 2007-2008 Proceedings of the 2nd International Conference on Transport & Logistics Systems
 2008-2010 Applied Mathematics and Computation (SCI)
 2008-2010 Computers and Operations Research (SCI)
 2010 Transportation Research Part B & E. (SCI/SSCI)

Publications: (TOTAL PAPERS; 51; SCI & SSCI: 32; numbers of cited over 100; SCOPUS: 26/05/2011)

1. Chiou, S-W (2011), A novel algorithm for area traffic capacity control with elastic travel demands, *Applied Mathematical Modelling*, 35, 650-666, (SCI, IF: 1.375, subject category: Engineering; rank: 17/79, Q1)
2. Chiou, S-W. (2011). Optimization for stock distribution in logistics network. In: W. Nelson (Ed.) *Advances in Business and Management*, Nova Science Publishers, New York. ISBN: 9781-61761-9984.
3. Chiou, S-W. (2011). Efficient implementations of bilevel programming methods for continuous network design problems. In: E.C. Salander (Ed.) *Computer Search Algorithms*, Nova Science Publishers, New York. ISBN: 9781-61122-5273
4. Chiou, S-W. (2011). A polynomial-time approximation algorithm for maximum concurrent flow problems. In: Z. Mann (Ed.) *Linear programming*. Nova Science Publishers, New York. In press.
5. Chiou, S-W. (2011), An optimization approach for inventory routing problem in congested road network. In: J.Varela and S. Acuna (Eds.) *Handbook of Optimization Theory: Decision Analysis and Application*, 117-138, Nova Science Publishers, New York. in press, ISBN 978-1-60876-500-3
6. Chiou, S-W. (2011), Optimization for network congestion management with elastic equilibrium flows. In: L.R. Hockley (Ed.) *Global Operations Management*, 99-116, Nova Science Publishers, New York. ISBN: 9781-61668-3511.
7. Chiou, S-W. (2010), Optimizing routing problems with metaheuristic in congested road network. In: A.R. Baswell (Ed.) *Advances in Mathematics Research*, Vol. 11, 83-102, Nova Science Publishers, New York. ISBN: 978-1-60876-970-4.
8. Chiou, S-W, (2010), Optimization of a nonlinear area traffic control system with

- elastic demand. *Automatica* 46, 1626-1635, (SCI, IF: 2.631, subject category: Automation & Control Systems, rank: 6/59; Q1, #cited: 1)
9. Chiou, S-W. (2010), An efficient algorithm for computing traffic equilibria using TRANSYT model. *Applied Mathematical Modelling*, 34, 3390-3399, (SCI, IF: 1.375, subject category: Engineering, rank:17/79; Q1, #cited: 2)
 10. Chiou, S-W. (2009), Optimization for signal setting problems using non-smooth techniques, *Information Sciences* 179, 2985-2996. (SCI, IF: 3.291, subject category: Computer Science, Information Systems, rank: 6/116; Q1, #cited: 2)
 11. Chiou, S-W. (2009), A bi-level programming for logistics network design with system-optimized flows, *Information Sciences* 179, 2434-2441, (SCI, IF: 3.291, subject category: Computer Science, Information Systems, rank: 6/116; Q1, #cited: 4).
 12. Chiou, S-W. (2009), Optimization of limited network capacity with toll settings, *Information Sciences* 179, 109-119. (SCI, IF: 3.291, subject category: Computer Science, Information Systems, rank: 6/116; Q1, #cited: 1)
 13. Chiou, S-W. (2009). An efficient algorithm for optimal design of area traffic control with network flows. *Applied Mathematical Modelling*, 33, 2710-2722. (SCI, IF: 1.375, subject category: Engineering, rank: 17/79; Q1, #cited: 2)
 14. Chiou, S-W. (2009). Simultaneously optimizing link tolls and signal settings in a road network. *Applied Mathematical Modelling*, 33, 2311-2323. (SCI, IF: 1.375, subject category: Engineering, rank: 17/79; Q1, #cited: 2)
 15. Chiou, S-W. (2009), A subgradient optimization model for continuous road network design problem, *Applied Mathematical Modelling*, 33, 1086-1096. (SCI, IF: 1.375, subject category: Engineering, rank: 17/79; Q1, #cited: 3)
 16. Chiou, S-W. (2008), An efficient search algorithm for network optimization, *Applied Mathematics and Computation*, 201, 128-137. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 5)
 17. Chiou, S-W. (2008), A nonsmooth model for signalized road network design problems, *Applied Mathematical Modelling*, 32(7), 1179-1190. (SCI, IF: 1.375, subject category: Engineering, rank: 17/79, Q1, #cited: 2)
 18. Chiou, S-W. (2008), A hybrid approach for optimal design of signalized road network, *Applied Mathematical Modelling*, 32(2), 195-207. (SCI, IF: 1.375, subject category: Engineering, rank: 17/79, Q1, #cited: 2)
 19. Chiou, S-W. (2008), Optimization of multi-tiered supply chain networks with equilibrium flows, In: V. Kordic (Ed.), *Supply Chains: Theory and Application*, ARS Publishing, Vienna, Austria, pp. 231-246. ISBN: 978-3-902613-22-6
 20. Chiou, S-W. (2008), Solving maximum concurrent flow problems in a signal-controlled road network, In: A. S. Becker (Ed.), *Concurrent and Parallel*

Computing: Theory, Implementation and Applications, 213-233, Nova Science Publishers, New York. ISBN: 978-1-60456-274-3.

21. Chiou, S-W. (2008), A fast polynomial time algorithm for logistics network flows, Applied Mathematics and Computation, 199(1), 162-170. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
22. Chiou, S-W. (2008), Optimization of congestion pricing road network with variable demands, Applied Mathematics and Computation, 195(2), 382-391. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
23. Chiou, S-W. (2008), Optimization algorithms for signalized road network design problem, In: S. E. Paterson and L. K. Allan (Eds.), Road Traffic: Safety, Modeling, and Impacts, 367-383. Nova Science Publishers, New York, ISBN 978-1-60456-884-4
24. Chiou, S-W. (2007), A solution scheme for link toll optimization problem, In: B.G. Heydecker (Ed.), Mathematics in Transport, Elsevier Limited, Oxford, pp. 59-70.
25. Chiou, S-W. (2007), A non-smooth optimization model for a two-tiered supply chain network, Information Sciences, 177(24) 5754-5762. (SCI, IF: 3.291, subject category: Computer Science, Information Systems, rank: 6/116, Q1, #cited: 3)
26. Chiou, S-W. (2007), Comparative tests of solution methods for signal-controlled road networks, Information Sciences, 177(19), 4109-4121. (SCI, IF: 3.291, subject category: Computer Science, Information Systems, rank: 6/116, Q1, #cited: 3)
27. Chiou, S-W. (2007), A descent framework for linked signal system with network flows, Applied Mathematics and Computation, 194(2), 441-452. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
28. Chiou, S-W. (2007), An optimization model for area traffic control with link tolls, Applied Mathematics and Computation, 192(2), 520-532. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
29. Chiou, S-W. (2007), Reserve capacity of signal-controlled road network, Applied Mathematics and Computation, 190(2), 1602-1611. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 6).
30. Chiou, S-W. (2007), An iterative scheme for signal settings and network flows, Applied Mathematics and Computation, 189(2), 1808-1815. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
31. Chiou, S-W. (2007), Optimal design of signal-controlled road network, Applied Mathematics and Computation, 189(1), 1-8. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
32. Chiou, S-W. (2007), A generalized iterative scheme for network design problem, Applied Mathematics and Computation, 188(2), 1115-1123. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 5)
33. Chiou, S-W. (2007), An efficient computation algorithm for area traffic control

- problem with link capacity expansions, *Applied Mathematics and Computation*, 188(2), 1094-1102. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
34. Chiou, S-W. (2007), A globally convergent iterative scheme for toll design network with signal settings, *Applied Mathematics and Computation*, 187(2), 1086-1099. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 3)
 35. Chiou, S-W. (2007), A combinatorial approximation algorithm for supply chain network flow problem, *Applied Mathematics and Computation*, 186(2), 1526-1536. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 2)
 36. Chiou, S-W. (2007), A hybrid optimization algorithm for area traffic control problem, *Journal of the Operational Research Society*, 58, 816-823. (SCI & SSCI, IF: 1.009, subject category: management, rank: 36/73, Q2, #cited: 2)
 37. Chiou, S-W. (2006), An optimal scheme for toll pricing problem, *Applied Mathematics and Computation*, 182(2), 1127-1136. (SCI, IF: 1.124, subject category: Applied Mathematics, rank: 61/204; Q2, #cited: 4)
 38. Chiou, S-W. (2006) Maximizing reserve capacity for a signalized road network design. *Proceedings of the IEEE ITSC 2006*, 2006 IEEE Intelligent Transportation Systems Conference, Toronto, Canada, September 17-20, 2006, pp.1090-1095.
 39. Chiou, S-W. (2005), Joint optimization for area traffic control and network flow. *Computers and Operations Research*, 32(11), pp 2821-2841 (SCI, IF: 2.116, subject category: Industrial Engineering, rank: 2/37, Q1, #cited: 4)
 40. Chiou, S-W. (2005), Bilevel programming for the continuous transport network design problem, *Transportation Research Part B*, 39(4), 361-383. (SCI & SSCI, IF: 2.268, subject category: Transportation Science and Technology, rank: 2/26, # cited: 41)
 41. Chiou, S-W. (2005), A combinatorial approximation algorithm for concurrent flow problem and its application. *Computers and Operations Research*, 32(4), 1007-1035. (SCI, IF: 2.116, subject category: Industrial Engineering, rank: 2/37, Q1, # cited; 2)
 42. Chiou, S-W. (2005), Integrating the inventory management and vehicle routing problems for congested urban logistics network, *Journal of the Eastern Asia Society for Transportation Studies*, Vol. 6, pp. 3038-3051.
 43. Chiou, S-W. (2004) Reserve capacity of a signalized road network with equilibrium flow, presented at Seoul Metropolitan Behavior in Networks (BINs) 2004 Fora, Seoul, Korea, July. Collected at proceedings pp 315-324.
 44. Chiou, S-W. (2003), TRANSYT derivatives for area traffic control optimisation with network equilibrium flows, *Transportation Research Part B*, 37(3) 263-290. (SCI & SSCI, IF: 2.268, subject category: Transportation Science and Technology, rank:

2/26, #cited: 18)

45. Chiou, S-W. (2001) Global supply chain network design: centralization vs. decentralization for inventory management and distribution, MIS Reviews, pp 11-46. ISSN: 1018-1393.
46. Chiou, S-W., Yu, C-Y (2001) Optimization of stock management for a centralized supply chain network, Information Management Research, 3(2), pp 109-131. ISSN: 1028-6209.
47. Wang, Y-H, Kao, Y-C, Chiou, S-W, Yu, C-Y (2001) Investigation of global supply chain inventory management strategies: a case study of Chunghwa picture tubes, Chinese Business Horizon, 2(1) pp 117-134. ISSN: 1606-0024.
48. Chiou, S-W. (1999) Optimisation of area traffic control for equilibrium network flows. Transportation Science, 33(3), pp 279-289. (SCI & SSCI, IF: 1.479, subject category: Transportation Science and Technology, rank: 10/26, #cited: 28)
49. Chiou, S-W. (1998) Bi-level formulation for equilibrium traffic flow and signal settings, In: Griffiths (Ed.), Mathematics in Transportation Planning and Control, Elsevier Science, London, pp. 59-68.
50. Chiou, S-W. (1998) Optimisation of traffic signal timings for user equilibrium flow. Proceedings of 3rd Transportation Research Board International Symposium on Highway Capacity, Vol I (Rysgaard, Ed) Danish Road Directorate, Copenhagen, pp 321-336. ISBN : 87-7491-905-9, ISSN : 0909-4288.
51. Chiou, S-W. (1997), Optimisation of area traffic control subject to user equilibrium traffic assignment, 25th European Transport Forum, Proceeding of seminar F, Transportation Planning Methods: Vol. 2, PTRC. London, pp. 53-64.