# **Curriculum Vitae**

Bertrand Miao-Tsong Lin (林妙聰) Gender: Male Marital status: Married (1 son and 1 daughter) Date of Birth: May 4, 1964 Nationality: Taiwan, ROC



Affiliation: Institute of Information Management Department of Information and Finance Management National Chiao Tung University (國立交通大學), Taiwan Job Position and Title: Professor (Aug. 2004~) Telephone: +886-3-5131472; Skype phone: nctu.taiwan1 ext. 31472 Email: bmtlin@mail.nctu.edu.tw

#### **Education:**

PhD: Computer Science and Information Engineering (Sep. 1988 ~ Nov. 1991)
MS: Computer and Information Science (Sep. 1986 ~ Jun. 1988)
BS: Information Science (equivalently, Computer Science) (Sep. 1982 – Jun. 1986)
National Chiao Tung University, Taiwan

#### **Career History:**

- Director of the Institute of Information Management, Vice Chairman of the Department of Information & Finance Management (Aug. 2009 ~ Jul. 2011), National Chiao Tung University
- Director, Center for Industrial Service and Extension Education, National Chi Nan University (國立暨南大學), Taiwan (Feb. 2003 ~ Jul. 2004)
- Chair, Department of Information Management, National Chi Nan University, Taiwan (Aug. 2003 ~ Jul. 2004)
- Professor, Department of Information Management, National Chi Nan University, Taiwan (Aug. 2001 ~ Jul. 2004)
- Professor and Chair, Department of Computer Science, Ming Chuan University, Taiwan (Aug. 2000 ~ Jul. 2001)
- Professor, Department of Information Management, Ming Chuan University, Taiwan (May 2000 ~ Jul. 2000)
- Associate Professor, Department of Information Management, Ming Chuan University, Taiwan (Aug. 1994 ~ May 2000)
- Second Lieutenant, Deputy Staff of Planning, Air Force HQs, Taiwan (Oct. 1992 ~ Jun. 1994)
- Post-Doctoral Associate Research Fellow, Department of Computer & Information Science, National Chiao Tung University, Taiwan (Feb. 1992 ~ Jul. 1992)

#### Visits:

- Visiting Professor, Faculty of Mathematical Science, The University of Technology, Sydney (Feb. 2010)
- Visiting Scholar, IBM Watson Research Center, Yorktown Heights, New York (Jun. 2008 ~ Sep. 2008)
- Visiting Scholar, Sobolev Institute of Mathematics, Russian Academy of Sciences, Novosibirsk (Jul. 2008)
- Visiting Scholar, Faculty of Mathematics and Computer Science, Adam Mickiewicz University, Poland (May 2006)
- Visiting Scholar, Department of Industrial & Operations Engineering, University of Michigan, Ann Arbor (Feb. 1999 ~ Aug. 1999)
- Senior Research Fellow, Department of Management, Hong Kong Polytechnic University, Hong Kong (Feb. 1996 ~ May 1996; Jul. 2000 ~ Sep. 2000; Apr. 2007; Oct. 2008)

### **Courses Offered**

Spring 2012 Operations Research II (Undergraduate) Advanced Computer Algorithms (Graduate) Fall, 2011

Discrete Mathematics (Undergraduate) Special Topics on Scheduling Theory (Graduate)

Spring, 2011

Advanced Computer Algorithms (Graduate)

Fall, 2010

Discrete Mathematics (Undergraduate)

Special Topics on Scheduling Theory (Graduate)

Spring, 2010

Advanced Computer Algorithms (Graduate) Fall, 2009

Discrete Mathematics (Undergraduate)

Scheduling Theory and Applications (Graduate)

2008: Sabbatical

Spring, 2007

Operations Research (Undergraduate)

Scheduling Theory and Applications (Graduate)

Fall, 2006

**Operations Research (Undergraduate)** 

Optimization Methods (Graduate)

Spring, 2006

Calculus II (Undergraduate)

Optimization Methods (Graduate) Fall, 2005 Calculus I (Undergraduate) Management Science: Theory and Applications (Graduate)

#### **Professional Affiliations:**

Chinese Society of Information Management 中華民國資訊管理學會 (CSIM) Chinese Institute of Industrial Engineers中國工業工程學會 (CIIE) Institute of Electrical and Electronics Engineers (IEEE) Institute for Operations Research and the Management Sciences (INFORMS) Taiwan Operations Research Society 台灣作業研究學會 (ORSTW) Production and Operation Management Society (POMS)

#### Awards:

Best Reviewer Award of Omega: The International Journal of Management Science, 2010 National Chiao Tung University Research Award (2006 ~ 2011) National Science Council Category-A Research Award (1996 ~ 2000) (This award was lifted in 2001.) Ming Chuan University Research Award (1995 ~ 2001) National Chi Nan University Research Award (2003) National Science Council Award for Supervised Outstanding Master Theses (2003)

## Professional Services:

#### Member of Editorial Board:

Computers and Operations Research (January/2006 ~) International Journal of Production Economics (April/2008 ~) Asia-Pacific Journal of Operational Research (September/2008 ~) Applied Computational Intelligence and Soft Computing (January/2008 ~) International Journal of Applied Metaheuristic Computing (November/2008 ~) International Journal of Planning and Scheduling (September/2009 ~) The Open Operations Research Journal (January/2008 ~) International Journal of Operations Research (May/2004 ~ October/008)

Ad hoc referee of 4OR, ACM/Springer Multimedia Systems Journal, Asian Journal of Control, Asia-Pacific Journal of Operations Research, Computers & Communication, Computers & Education, Computers & Industrial Engineering, Computers & Operations Research, Decision Support Systems, Discrete Optimization, Engineering Optimization, European Journal of Operational Research, IEEE Transactions on SMC-A, IEEE Transactions on SMC-B, IIE Transactions, IET Communications, IET Control, Information Sciences, Interfaces, International Journal of Manufacturing Technology and Management, International Journal of Operations Research, International Journal of Production Economics, International Transactions in Operational Research, Journal of Combinatorial Optimization, Journal of Manufacturing Systems, Journal of the Operational Research Society, Journal of Business Administration, Journal of the CIIE, Journal of Scheduling, Naval Research Logistics, Omega, Production and Operations Management, Production Planning and Control, Journal of Management (local journal), Management and Systems (local journal), NSYSU Management Review (local journal), Industry Forum (local journal)

### Refereed Journal Papers

- 1. F.J. Hwang, M.Y. Kovalyov and <u>B.M.T. Lin</u>, Total completion time minimization in two-machine flow shop scheduling problems with a fixed job sequence, accepted by *Discrete Optimization*.
- 2. F.J. Hwang and <u>B.M.T. Lin</u>, Assembly-type flowshop batch scheduling subject to a fixed job sequence, *Journal of the Operational Research Society*, in press.
- 3. S.V. Sevastyanov, <u>B.M.T. Lin</u> and H.L. Huang, Minimizing the makespan in the relocation problem subject to release dates, *Theoretical Computer Science*, Vol. 39, 2011, pp. 1206-1212.
- 4. T.C.E. Cheng, <u>B.M.T. Lin</u> and H.L. Huang, Makespan minimization in the relocation problem with separate resource recycling operations, *Computers and Operations Research*, in press.
- 5. <u>B.M.T. Lin</u> and T.C.E. Cheng, Concurrent open shop scheduling with centralized and decentralized batching policies, *Naval Research Logistics*, Vol. 58, No. 1, 2011, pp. 17-27.
- 6. F.J. Hwang and <u>B.M.T. Lin</u>, Coupled-task scheduling with a fixed job sequence, *Computer & Industrial Engineering*, Vol. 60, 2011, pp. 690-698.
- 7. <u>B.M.T. Lin</u> and F.J. Hwang, Total completion time minimization of fixed job sequences in a two-stage differentiation flowshop, *Information Processing Letters*, Vol. 111, 2011, pp. 208–212.
- 8. M.T. Chen, <u>B.M.T. Lin</u> and S.S. Tseng, An ant colony optimization for the dynamic routing and wavelength assignment in WDM networks with sparse wavelength conversion, *Engineering Applications of Artificial Intelligence*, Vol. 24, No. 2, 2011, pp. 295-305.
- 9. S. Gawiejnowicz and <u>B.M.T. Lin</u>, Scheduling time-dependent jobs under mixed deterioration, *Applied Mathematics and Computation*, Vol. 216, No. 2, 2010, pp. 438-447.
- 10. A.V. Kononov and <u>B.M.T. Lin</u>, The relocation problem to minimize the weighted completion time, *Journal of Scheduling*, Vol. 13, No. 2, 2009, pp. 123-129.
- 11. T.C.E. Cheng, <u>B.M.T. Lin</u> and Y. Tian, Minimizing weighted machine load in a two-stage flowshop with a common critical machine, *Computers & Operations Research*, Vol. 36, 2009, pp. 3031-3040.
- 12. <u>B.M.T. Lin</u> and S.T. Liu, Maximizing total reward in the relocation problem subject to generalized due dates, *International Journal of Production Economics*, Vol. 115, 2008, pp. 55-63.
- F.C. Lin, J.S. Hung and <u>B.M.T. Lin</u>, Scheduling two-machine flowshops with continuous buffer constraints - An application to automatic multimedia presentation assembly, *Computers and Operations Research*, Vol. 36, 2009, pp. 1158-1175.
- 14. T.C.E. Cheng and <u>B.M.T. Lin</u>, Johnson's rule, composite jobs and the relocation problem, *European Journal of Operational Research*, Vol. 192, No. 3, 2009, pp. 1008–1013.
- 15. <u>B.M.T. Lin</u>, C.Y. Lu, S.J. Shyuc and C.Y. Tsai, New features of ant colony optimization for scheduling problems, *International Journal of Production Economics*, Vol. 112, 2008, pp. 742-755.
- 16. <u>B.M.T. Lin</u> and A.V. Kononov, Customer order scheduling to minimize the number of late orders, *European Journal of Operational Research*, Vol. 183, No. 2, 2007, pp. 944-948.
- 17. A.A.K. Jeng and <u>B.M.T. Lin</u>, A note on parallel-machine scheduling with deteriorating jobs, *Journal of the Operational Research Society*, Vol. 58, N. 6, 2007, pp. 824-826.

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- 18. <u>B.M.T. Lin</u>, Complexity results on single-machine scheduling with positional learning effects, *Journal of the Operational Research Society*, Vol. 58, No. 8, 2007, pp. 1099-1102.
- 19. M.T. Chen, <u>B.M.T. Lin</u> and S.S. Tseng, Multicast routing and wavelength assignment with delay constraints in WDM networks with heterogeneous capabilities, *Journal of Network and Computer Applications*, Vol. 31, No. 1, 2007, pp 47-65.
- 20. A.V. Kononov and <u>B.M.T. Lin</u>, On the relocation problems with multiple identical working crews, *Discrete Optimization*, Vol. 3, No. 4, 2006, pp. 368-381.
- 21. <u>B.M.T. Lin</u>, T.C.E. Cheng and A.S.C. Chou, Scheduling in an assembly-type production chain with batch transfer, *Omega*, Vol. 35, 2007, pp. 143-151.
- 22. <u>B.M.T. Lin</u> and T.C.E. Cheng, Two-machine flowshop scheduling with time lags, *International Transactions in Operational Research*, Vol. 13, No. 2, 2006, pp. 1-8.
- 23. <u>B.M.T. Lin</u> and J.M. Wu, Bicriteria scheduling in a two-machine permutation flowshop, *International Journal of Production Research*, Vol. 44, No. 12, 2006, pp. 2299 2312.
- 24. M.T. Chen, S.S. Tseng, <u>B.M.T. Lin</u>, Dynamic multicast routing under delay constraints in WDM networks with heterogeneous light splitting capabilities, *Computer Communications*, Vol. 29, No. 9, 2006, pp. 1492-1503.
- 25. <u>B.M.T. Lin</u>, F.C. Lin and R.C.T. Lee, Two-machine flowshop scheduling to minimize total late work, *Engineering Optimization*, Vol. 34, No. 4, 2006, pp. 501-509.
- 26. <u>B.M.T. Lin</u> and H.L. Huang, On the relocation problem with a second working crew for resource recycling, *International Journal of Systems Science*, Vol. 37, No. 1, 2006, pp. 27-34.
- 27. G.J. Hwang and T.L. Lin, and <u>B.M.T. Lin</u>, An effective approach for test-sheet composition from large-scale item banks, *Computers & Education*, Vol. 46, No. 2, 2005, pp. 122-139.
- 28. <u>B.M.T. Lin</u> and J.M. Wu, A simple lower bound for two machine flowshop scheduling to minimize total completion time, *Asia Pacific Journal of Operational Research*, Vol. 22, No. 3, 2005, pp. 391-408.
- 29. S.J. Shyu, <u>B.M.T. Lin</u> and T.S. Hsiao, Ant colony optimization algorithm for the cell assignment problem in PCS networks, *Computers & Operations Research*, Vol. 33, No. 6, 2006, pp 1713-1740.
- 30. G.J. Hwang, <u>B.M.T. Lin</u>, S.H. Tseng and T.L. Lin, On the development of a computer-assisted testing system with genetic test sheet-generating approach, *IEEE Transactions on Systems, Man and Cybernetics: Part C*, Vol. 35, No. 4, 2005, pp. 590-594.
- 31. <u>B.M.T. Lin</u> and T.C.E. Cheng, Two-machine flowshop batching and scheduling, *Annals of Operations Research*, Vol. 133, 2005, pp. 149-161.
- 32. S.J. Shyu, <u>B.M.T. Lin</u> and P.Y. Yin, Applications of ant colony optimization for no-wait flowshop scheduling to minimize the total completion time, *Computers & Industrial Engineering*, Vol. 47, No. 2-3, 2004, pp. 181-193.
- 33. <u>B.M.T. Lin</u> and A.A.K Jeng, Parallel-machine batch scheduling to minimize the maximum lateness and the number of tardy jobs, *International Journal of Production Economics*, Vol. 91, No. 2, 2004, 121-134
- 34. S.J. Shyu, P.Y. Yin and <u>B.M.T. Lin</u>, An ant colony optimization algorithm for the minimum weight vertex cover problem, *Annals of Operations Research*, Vol. 131, 2004, 283-304.
- 35. A.A.K. Jeng and <u>B.M.T. Lin</u>, Minimizing the total completion time in single-machine scheduling with step-deteriorating jobs, *Computers & Operations Research*, Vol. 32, 2004, pp. 521-536.
- 36. <u>B.M.T. Lin</u> and J.M. Wu, Effective lower bounds for scheduling problems in two-stage hybrid flowshops, *Journal of Management*, Vol. 22, No. 3, 2004.
- 37. A.A.K. Jeng and <u>B.M.T. Lin</u>, Makespan minimization in single-machine scheduling with step-deterioration of processing times, *Journal of the Operational Research Society*, Vol. 55,

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- 38. T.C.E. Cheng, Q. Ding and <u>B.M.T. Lin</u>, A concise survey of scheduling with time-dependent processing times, *European Journal of Operational Research*, Vol. 152, No. 1, 2003, pp. 1-13.
- 39. Y.H. Hsu and <u>B.M.T. Lin</u>, Algorithms for operations scheduling with linear deterioration, *Omega*, Vol. 31, No. 6, 2003, 459-469.
- 40. S.J. Shyu, P.Y. Yinc, <u>B.M.T. Lin</u> and Haouari, Ant-Tree: An ant colony optimization approach to the generalized minimum spanning tree problem, *Journal of Experimental and Theoretical Artificial Intelligence*, Vol. 15, No. 1, 2003, pp. 103-112.
- 41. Y.S. Huang and <u>B.M.T. Lin</u>, An empirical study on TQM implementation in Taiwan, *TQM Magazine*, Vol. 14, No. 3, 2002, pp. 172-180.
- 42. <u>B.M.T. Lin</u> and T.C.E. Cheng, Fabrication and assembly scheduling in a two-machine flowshop, *IIE Transactions*, Vol. 34, No. 11, 2002, pp. 1015-1020.
- 43. <u>B.M.T. Lin</u>, Fabrication scheduling in a two-machine flowshop with due date constraints, *European Journal of Operational Research*, Vol. 136, No. 1, 2002, pp. 95-105.
- 44. <u>B.M.T. Lin</u>, H.K. Yu and Y.S. Huang, A heuristic algorithm for the generalized assignment problem, *International Journal of Computer Mathematics*, Vol. 77, No. 4, 2001, pp. 535-561.
- 45. <u>B.M.T. Lin</u> and T.C.E. Cheng, Batch scheduling in a no-wait two-machine flowshop, *Computers & Operations Research*, Vol. 28, No. 7, 2001, pp. 613-624.
- 46. <u>B.M.T. Lin</u>, Scheduling in a two-machine flowshop with due date constraints, *International Journal of Production Economics*, Vol. 70, No.2, 2001, pp. 117-123.
- 47. S.J. Shyu and <u>B.M.T. Lin</u>, An application of PVM framework to film production problem, *Computers & Mathematics with Applications*, Vol. 39, No. 12, 2000, pp. 53-62.
- 48. T.C.E. Cheng, <u>B.M.T. Lin</u> and A. Toker, Flowshop batching and scheduling to minimize the makespan, *Naval Research Logistics*, Vol. 47, No. 2, 2000, pp. 128-144.
- 49. <u>B.M.T. Lin</u>, A new branch-and-bound algorithm for the film production problem (in Chinese), *Journal of Ming Chuan University*, Vol. 10, No. 1, 1999, pp. 101-110.
- 50. <u>B.M.T. Lin</u> and T.C.E. Cheng, Relocation problems to minimize the maximum tardiness and the number of tardy jobs, *European Journal of Operational Research*, Vol. 116, No. 1, 1999, pp. 183-193.
- 51. T.C.E. Cheng, Z.L. Chen, C.L. Li and <u>B.M.T. Lin</u>, Single machine scheduling to minimize the sum of compression and late costs, *Naval Research Logistics*, Vol. 45, 1998, pp. 67-82.
- 52. <u>B.M.T. Lin</u>, On the strong NP-hardness of two-stage flowshop scheduling problem with a common second-stage machine, *Computers & Operations Research*, Vol. 26, No. 7, 1999, 695-698.
- 53. <u>B.M.T. Lin</u> and S.J. Shyu, A random search strategy for the film production problem (in Chinese), *MIS Review*, Vol. 6, 1997, pp. 17-26.
- 54. C. Oguz, <u>B.M.T. Lin</u> and T.C.E. Cheng, Two-stage flowshop scheduling problem with a common second-stage machine, *Computers & Operations Research*, Vol. 24, No. 12, 1997, pp. 1169-1174.
- 55. S.S. Tseng, <u>B.M.T. Lin</u> and S.H. Liu, Constructing Nγ Latin squares for  $\gamma \neq 2^{\alpha}$ , *Journal of Information Science and Engineering*, Vol. 13, 1997, pp. 605-613.
- T.C.E. Cheng, M.Y. Kovalyov and <u>B.M.T. Lin</u>, Single machine scheduling to minimize the batch delivery and job earliness penalty, *SIAM Journal on Optimization*, Vol. 7, No. 2, 1997, pp. 547-559.
- 57. T.C.E. Cheng, Z.L. Chen, M.Y. Kovalyov and <u>B.M.T. Lin</u>, Parallel-machine batching and scheduling to minimize total completion time, *IIE Transactions*, Vol. 28, 1996, pp. 953-956.
- 58. B.M.T. Lin, On finding the most vital job in relocation problems, Journal of the Operations

Research Society of Japan, Vol. 37, No. 3, 1994, pp. 182-187.

- 59. T.C.E. Cheng, J. Diamond and <u>B.M.T. Lin</u>, Optimal scheduling in film production to minimize talent hold cost, *Journal of Optimization Theory and Applications*, Vol. 79, No. 3, 1993, pp. 197-206.
- 60. C.Y. Lee, T.C.E. Cheng and <u>B.M.T. Lin</u>, Minimizing the makespan in the three-machine assembly type flow shop problem, *Management Science*, Vol. 39, No. 5, 1993, pp. 616-625.
- 61. <u>B.M.T. Lin</u> and S.S. Tseng, Generating the best *K* sequences in the relocation problems, *European Journal of Operational Research*, Vol. 69, No. 1, 1993, pp. 131-137.
- 62. <u>B.M.T. Lin</u> and S.S. Tseng, On the relocation problems of maximizing new capacities under a common due-date, *International Journal of Systems Science*, Vol. 23, No. 9, 1992, pp. 1433-1448.
- 63. <u>B.M.T. Lin</u> and S.S. Tseng, Some results of relocation problems with processing times and deadlines, *International Journal of Computer Mathematics*, Vol. 41, No. 1, 1991, pp. 1-15.