# JANNY M. Y. LEUNG

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#### **EDUCATION**

1981-1986	Massachusetts Institute of Technology
	Ph.D. in Operations Research (1986).
	Thesis advisor: Professor Thomas Magnanti.

- **1979-1981** Magdalen College, Oxford Bachelor of Arts in Mathematics (Upper Second Class Honours).
- 1975-1979Radcliffe College, Harvard University<br/>Bachelor of Science in Applied Mathematics (Cum Laude).

#### **ACADEMIC POSITIONS**

2019	The University of Macau
	Master, Choi Kai Yau College.

- **2016-2019** The Chinese University of Hong Kong, Shenzhen Founding Master, Shaw College, Professor, School of Science and Engineering.
- 1998-2016The Chinese University of Hong Kong<br/>Associate Professor/ Professor,<br/>Systems Engineering & Engineering Management Department.
- **1996-1998** City University of Hong Kong Associate Professor, Management Sciences Department.

# 1991-1997 University of Arizona

Assistant Professor/ Associate Professor (tenured), Management Information Systems Department

1986-1991Yale University<br/>Assistant Professor, Operations Research Department<br/>Assistant Professor, Yale School of Organization and Management

#### Visiting appointments:

2013 (Jan-Mar)	Visiting Professor, Sophia University, Tokyo
2008 (Jan-Jun)	Visiting Fellow, Clare Hall, Cambridge University
2002 (Mar)	Visiting professor, The Logistics Institute – Asia Pacific, Singapore
2001 (Jul)	Visiting professor, I.B.M. Thomas J Watson Research Center
2000 (May)	Visiting professor, Université Catholique de Louvain, Belgium
	Centre for Operations Research and Econometrics (CORE)
1989 (Spring)	Visiting Assistant Professor, Sloan School of Management, M.I.T.
1980 (Summer)	Instructor, Kennedy School of Government, Harvard University

#### HONOURS and AWARDS

- 2020 Fellow, Institute for Operations Research and the Management Sciences (Informs)
- 2014 Fellow, Chartered Institute of Logistics and Transport
- 2012 Founding Fellow, Logistics and Transportation Division, Hong Kong Institution of Engineers
- 2009- Life member, Clare Hall, Cambridge University
- **2004** Vice-Chancellor's Exemplary Teaching Award, Chinese University of Hong Kong Recognised as the best teacher of the year of the Faculty of Engineering.

# **PUBLIC SERVICE**

2015-2021	<b>Innovation and Technology Commission, Hong Kong SAR</b> Assessor, <i>Enterprise Support Scheme (ESS)</i> .
2014-2020	<b>Hong Kong Logistics Development Council,</b> Member Appointed by the Hong Kong Government, the Logscouncil is a policy forum for all stakeholders in the Logistics industry Hong Kong.
2008-2020	Hong Kong Logistics and Supply Chain Multi-Tech R&D Centre Member, Expert Review Panel.
2017-2019	Legal Aid Services Council, Hong Kong Task Force on Dissemination of Legal Aid Information
2011-2016	Hong Kong Research Grants Council Panel member (Engineering)
2009-2012	Innovation and Technology Commission, Hong Kong SAR, Assessor, Small Entrepreneurship Research Assistance Programme
2003-2013	Hong Kong Education Bureau Member, Joint Curriculum Development Council - Hong Kong Examinations and Assessment Authority Committee on DSE Syllabus: Design and Technology Curriculum Development Council Committee on Technology Education (2007- 09).
1999-2011	The Rhodes Scholarships,
	Hong Kong Selection Committee

## **QUALIFICATIONS**

#### **2014** Certified Analytics Professional (CAP). First in East Asia to be qualified, 184<sup>th</sup> in the world to be qualified.

#### **RESEARCH GRANTS**

## 2017-2019 Hong Kong Food and Health Bureau

Health and Medical Research Fund: Striking a Balance between Cost Effectiveness and Efficiency of Emergency Departments in Hong Kong: An Integrated Approach of Data Analytics, Simulation and System Optimization (Co-Investigator, HK\$ 762,920)

## 2016-2019 The Chinese University of Hong Kong, Shenzhen

President's Fund: Incorporating Big Data Analytics with Humanitarian Logistics (Principal Investigator, RMB300,000)

## 2015-2017 Hong Kong Research Grants Council

General Research Fund Grant: Integrating Simulation with Variable Neighbourhood Search for Estimating Latent Variables (Co-Investigator, HK\$ 329,061)

## 2014-2016 Microsoft Research Asia

Regional Seed Grant: Back to the Future: Sense-and Respond Public Transit for Historic Urban Centres (Principal Investigator (Principal Investigator, US\$20,000)

## 2013-2016 Hong Kong Research Grants Council

General Research Fund Grant: Sustainable Public Transit -- On-demand Transit Systems with Electric Vehicles (PI: HK\$500,000)

# 2012-2015 Hong Kong Research Grants Council

Direct Allocation Research Grant: Ready, Willing and Able -- Optimal Workforce Planning with Multiple Locations, Flexible Schedules and Heterogeneous Skills (PI: HK\$60,492)

## 2009-2011 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: Co-petition for Public Transit Services (PI: HK\$418,552)

# 2008-2010 Hong Kong Research Grants Council

Direct Allocation Research Grant: Vehicle Routing with Split Deliveries (PI: HK\$91,166)

## 2007-2008 Hong Kong Research Grants Council

Direct Allocation Research Grant: Robust Orienteers with Knapsacks (PI: HK\$105,000)

## 2004-2007 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: Manpower Planning and Scheduling with Workforce Flexibility (PI: HK\$337,631)

#### 2003-2006 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: A Traffic Inference Engine for Travel-Time Estimation (PI: HK\$377,149)

## 2001-2005 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: Logistics Support for Mobile Commerce (PI: HK\$774,497)

## 1999-2002 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: Gain-sharing in Third-Party Logistics Alliances: Game-Theoretic Models and Empirical Investigations (PI: HK\$405,000)

## 1998-2001 Hong Kong Research Grants Council

Direct Allocation Research Grant: Polyhedral Combinatorial Methods for Planning Problems with Interaction Costs (PI: HK\$150,000)

## 1997-2000 Hong Kong Research Grants Council

Competitive Earmarked Research Grant: Global Logistics Management: Combinatorial Optimisation Methods for Supply/Distribution Network Planning (PI: HK\$598,000)

## 1996-1998 City University of Hong Kong

Strategic Research Grant: Global Supply Chain Management and Design: Mixed Integer Programming Models and Methods (PI: HK\$379,413)

## 1993-1994 University of Arizona Foundation

Small Grants Program: Combinatorial Optimization Methods for Systems Design. (PI: US\$4,000)

## **1989-1992** U.S. National Science Foundation

Research Initiation Grant: Polyhedral Combinatoric Methods for Integrative Manufacturing Systems. (PI: US\$60,000)

# **REFEREED PUBLICATIONS**

"Single-item reparable inventory system with stochastic new and warranty demands", Y. Lin, J.M.Y. Leung, L. Zhang, J.-W. Gu, *Transportation Research Part E*, 142, 102035 (2020).

"An Integrated Approach of Machine Learning and Systems Thinking for Waiting Time Prediction in an Emergency Department", Y.-H. Kuo, N.B. Chan, J.M.Y. Leung, H. Meng, A. M.-C. So, K. F. Tsoi, C.A. Graham, *International Journal of Medical Informatics*, 139, 104143 (2020).

"A graph-based formulation for the shift rostering problem", D.S.W. Lai, J.M.Y. Leung, W. Dullaert and I. Marques, *European Journal of Operational Research*, 284, 285-300 (2020).

"A Survey of Dial-a-ride Problems: Literature Review and Recent Developments", S. C. Ho, W.Y. Szeto, Y.-H. Kuo, J.M.Y. Leung, M. Petering and T.W.H. Tou, *Transportation Research Part B*, 111: 395-421 (2018).

"Real-time re-scheduling and disruption management for public transit", David S.W. Lai and Janny M.Y. Leung, *Transport Transport Dynamics*, 6(1): 17-33 (2018).

"Using Simulation to Assess the Impacts of the Adoption of a Fast-Track System for Hospital Emergency Services", Y.-H. Kuo, J.M.Y. Leung, C.A. Graham, K.K.F. Tsoi and H.M. Meng, *Bulletin of the Japan Society of Mechanical Engineers*, 12 (3): 1-11 (2018).

"Improved solution strategies for dominating trees", P. Adasme, R. Andrade, J. Leung and A. Lisser, *Expert Systems with Applications*, 100: 30-40 (2018).

"On a Traveling Salesman based Bilevel Programming Problem", P. Adasme, R. Andrade, J. Leung and A. Lisser, *Proceedings of the 6th International Conference on Operations Research and Enterprise Systems (ICORES)*, 329-336. (2017)

"Progressive Hedging and Sample Average Approximation for the Two-stage Stochastic Traveling Salesman Problem" P. Adasme, J. Leung and I. Soto, *Proceedings of the 6th International Conference on Operations Research and Enterprise Systems*, 440-446. (2017)

"On the Mixed Set Covering, Packing and Partitioning Polytope", Y.-H. Kuo and J.M.Y. Leung, *Discrete Optimization*, 22: 162-182 (2016).

"A Tabu Search Heuristic for the Heterogeneous Vehicle Routing Problem on a Multigraph", D.S.W. Lai, O. Caliskan Demirag and J.M.Y. Leung, *Transportation Research Part E: Logistics and Transportation Review*, 86: 32-52 (2016).

"On the Right Track: Optimisation Models for Railway Planning", J.M.Y. Leung, Y.-H. Kuo and D. S.-W. Lai, *Mathematics TODAY*, October 2016, p. 212-215.

"New reformulations of distributionally robust shortest path problem", J. Cheng, J. Leung and A. Lisser, *Computers and Operations Research*, 74: 196-204 (2016).

"Real-Time Integrated Re-scheduling for Public Transit", J.M.Y. Leung, D.S.W. Lai, Y.-H. Kuo and H.K.F. Cheung, *Proceedings of the Third International Conference on Railway Technology: Research, Development and Maintenance*, J. Pombo, (Editor), Civil-Comp Press, Scotland. (2016).

"Models for minimum cost dominating trees", P. Adasme, R. Andrade, J. Leung and A. Lisser, *Electronic Notes in Discrete Mathematics*, 52: 101-107 (2016).

"Stochastic nonlinear resource allocation problem", J. Cheng, A. Lisser and J. Leung, *Electronic Notes in Discrete Mathematics*, 52: 173-180 (2016).

"Random-payoff two-person zero-sum game with joint chance constraints", J. Cheng, J.M.Y. Leung and A. Lisser, *European Journal of Operational Research*, 252: 213-219 (2016).

"A Two-stage Stochastic Programming Approach for the Traveling Salesman Problem", P. Adasme, R. Andrade, J.M.Y. Leung and A. Lisser, *Proceedings of the 5<sup>th</sup> International Conference on Operations Research and Enterprise Systems (ICORES)*, 163-169 (2016).

"Improving the efficiency of a hospital emergency department: a simulation study with indirectly imputed service-time distributions", Y.H. Kuo, O. Rado, B. Lupia, J.M.Y. Leung and C.A. Graham, *Flexible Services and Manufacturing Journal*, 28(1): 120-147 (2016).

"Resource Allocation in Uplink Wireless Multi-cell OFDMA Networks", P. Adasme, J.M.Y. Leung and A. Lisser, *Computer Standards & Interfaces*, 44: 274-289 (2016).

"How do Missing Patients Aggravate Emergency Department Overcrowding? A Real Case and a Simulation Study", Y.-H. Kuo, J.M.Y. Leung and C.A. Graham, *Proceedings of the Second International Conference on Health Care Systems Engineering*, (Lyon, France). In: Matta A., Sahin E., Li J., Guinet A., Vandaele N. (eds) Health Care Systems Engineering for Scientists and Practitioners. *Springer Proceedings in Mathematics & Statistics*, vol 169, p. 167-177, Springer Switzerland (2016).

"Real-Time Optimization for Disaster Response: A Mathematical Programming Approach", H. H. Chan, K.L. Wong, Y.-H. Kuo, J.M.Y. Leung, K.K.F. Choi and H.M. Meng, *International Journal of Big Data (IJBD)*, 2(2), 2015, pp. 15-27.

"Single-item repairable inventory system with new and warranty demand", Y. Lin and J.M.Y. Leung, *Proceedings of the International Symposium on Scheduling* (Kobe), p.1-8 (2015).

"A Real-Time Decision Support Tool for Disaster Response: A Mathematical Programming Approach", Y.-H. Kuo, J.M.Y. Leung, H.M. Meng and K.K.F. Choi, *Proceedings of the 2015 IEEE International Congress on Big Data*, (New York), p. 639-642 (2015).

"Embracing Big Data for Simulation Modelling of Emergency Department Processes and Activities", Y.-H. Kuo, J.M.Y. Leung, K.K.F. Choi, H.M. Meng and C.A. Graham, *Proceedings of the 2015 IEEE International Congress on Big Data*, (New York), p313-316 (2015).

"Using Simulation to Examine the Effect of Physician Heterogeneity on the Operational Efficiency of an Overcrowded Hospital Emergency Department", Y.-H. Kuo, J.M.Y. Leung and C.A. Graham, (Mini EURO Conference on Improving Healthcare: new challenges, new approaches) *Journal of Physics: Conference Series*, Vol. **616**, 012017 (2015).

"Game Theoretic Models for Competition in Public Transit Services", Y.S. E. Chan and J.M.Y. Leung, *Proceedings of the International Conference on Operations Research and Enterprise Systems (ICORES-2015)*, 133-139.

"A comparative Study of Network-based Approaches for Routing in Healthcare Wireless Body Area Networks", P. Adasme, R. Andrade, J.M.Y. Leung and A.Lisser, *Proceedings of the International Conference on Operations Research and Enterprise Systems (ICORES)*,125-132. (2015)

"The p-Median Problem with Concave Costs", C.Xu, A. Lisser, J.M.Y. Leung and M. Letournel, *Proceedings of the International Conference on Operations Research and Enterprise Systems (ICORES)*,205-212. (2015)

"Using Simulation to Analyze Patient Flows in a Hospital Emergency Department in Hong Kong", Rado O., Lupia B., Leung J.M.Y., Kuo Y.H., Graham C.A. *Springer Proceedings in Mathematics & Statistics*, Vol. 61, pp 289-301 (2014).

"Scheduling of Multi-skilled Staff Across Multiple Locations", Y.H. Kuo, J.M.Y. Leung and C.A. Yano, *Production and Operations Management* 23:4, (2014) 626-644.

"From Preparedness to Recovery: A Tri-level Programming Model for Disaster Relief Planning", IROHARA Takashi; KUO Yong Hong and LEUNG J.M.Y., in D. Pacino, S. Voss,

R.M. Jensen (eds.) *Computational Logistics*, Lecture Notes in Computer Science 8197, pp.213-228. Heidelberg, Germany: Springer Verlag, 2013.

"Workforce Scheduling: Models, Methods and Future Challenges" (Keynote Address). *Proceedings of the International Symposium on Scheduling* (2013), Tokyo, Japan.

"Simulation with Data Scarcity: Developing a Simulation Model of a Hospital Emergency Department". KUO Yong Hong; LEUNG J.M.Y. and GRAHAM C A. *Proceedings of the 2012 Winter Simulation Conference*, Laroque, et al. (eds.), IEEE, Berlin, Germany (2012).

"On a Stochastic Bilevel Programming Problem", S. Kosuch, P. Le Bodic, J.M.Y. Leung and A. Lisser, *Networks*, *59:1*, (2012) 107-116.

"A Polytope for a Product of Real Linear Functions in Zero-One variables", O. Gunluk, J. Lee and J. Leung, in J. Lee and S. Leyffer (Eds), *Mixed-Integer Nonlinear Programming* (The IMA Volumes in Mathematics and its Applications, vol. 154, Springer), 2012.

"Solving a manpower scheduling problem for airline catering using metaheuristics", S. C. Ho and J.M.Y. Leung, *European Journal of Operational Research*, 202:3, (2010) 903-921.

"A Markov model for TCP congestion control", N. Lam and J.M.Y. Leung, *Technology, Operations and Management, 1:1* (2010) 62-74.

"Optimising Timetable Synchronisation for Rail Mass Transit", R.C.W. Wong, T.W.Y. Yuen, K.W. Fung and J.M.Y. Leung, *Transportation Science*, 42 (2008) 57-69.

"Competition among public transit operators", E. Chan, J. Leung, *Proceedings of the 12<sup>th</sup> Conference of Hong Kong Society for Transportation Studies*, (2007), p. 651.

"A map-based decision-support system for delivery planning", J.C.F. Wong, P.T.W. Fung, C.H. Cheng, J. Leung, *International Journal of Services Operations and Informatics*, 2:1 (2007) 1-17.

"An efficient algorithm for multi-hoist cyclic scheduling with fixed processing times", J. Leung and E. Levner, *OR Letters* 34:4 (2006) 465-472.

"Separating Type-I Odd-cycle Inequalities for a Binary-Encoded Edge-Coloring Formulation", J. Lee, J. Leung and S. de Vries, *Journal of Combinatorial Optimization 9:1* (2005) 59-67.

"Inventory lot-sizing with supplier selection", C. Basnet and J. Leung, *Computers and Operations Research, 32:1, January,* 2005, 1-14. [A preliminary version was published in the Proceedings of the 37<sup>th</sup> Annual Conference of the Operational Research Society of New Zealand, (2002) 217-226.]

"Optimal cyclic multi-hoist scheduling: A mixed integer programming approach", J. Leung, G. Zhang, X. Yang, R. Mak, K. Lam, *Operations Research 52:6* (2004), 965-976.

"On a vehicle routing problem with time windows and stochastic travel times", J.C.F. Wong, J. Leung, C.H. Cheng, *Proceedings of the 10<sup>th</sup> Conference of Hong Kong Society for Transportation Studies*, (2005), p. 550.

"On the uncapacitated *K*-commodity network design problem with zero flow-costs", A. S.F. Ng, T. Sastry, J. Leung, X. Cai, *Naval Research Logistics*, *51:8* (2004) 1149-1172.

"On the Boolean quadric forest polytope", J. Lee and J. Leung, INFOR, 42:2 (2004), 125-141.

"Min-up/Min-down polytopes", J. Lee, J. Leung, F. Margot, *Discrete Optimization*, 1 (2004), 77-85.

"Optimal cyclic scheduling for printed-circuit-board production lines with multiple hoists and general processing sequence", J. Leung and G. Zhang, *IEEE Transactions on Robotics and Automation*, 19:3 (2003), 480-484.

"Map-based decision support for logistics planning", J.C.F. Wong, P.T.W. Fung, J.M.Y. Leung and C.H. Cheng, *Proceedings of the 8<sup>th</sup> Conference of Hong Kong Society for Transportation Studies*, (2003), p. 291-297.

"Configuring a manufacturing firm's supply network with multiple suppliers", B. Kim, J. Leung, K.T. Park, G. Zhang, S. Lee, *IIE Transactions*, 34:8 (2002), 663-677.

"The impact of forecasting model selection on the value of information sharing in a supply chain", X. Zhao, J. Xie, J. Leung, *European Journal of Operational Research*, 142:2 (2002), 321-344.

"Quota Allocation by Linear Programming Using a Spreadsheet Solver", J. Leung and A. Yu, *Asia-Pacific Journal of Operational Research, 19* (2002) 63-70.

"Challenges and Opportunities of Hong Kong as a Transshipment Hub: A Survey of Exporters and Transporters", K. Lam, R.S.M. Lau and J. Leung, *Industrial Engineering Research*, 2:2 (2001) 103-125.

"Map-based Logistics Support with Dynamic Routing", J. Leung, C.H. Cheng, J.C.F. Wong and P.T.W. Fung, Preprint of the *Triennial Symposium on Transportation Analysis IV*, (2001) p. 43-47, São Miguel, Azores, Portugal.

"Livestock Feed Distribution and Arc Traversal Problems", M. Dror, J. Leung, P.A. Mullaseril, in *Arc Routing: Theory, Solutions and Applications, M. Dror (ed.), Kluwer (2000), p. 443-474.* 

"Discrete Deterministic and Stochastic Blending Problems with Two Quality Characteristics: Aluminum Blending", D. Blanchard-Gaillard, C. Yano J. Leung and M. Brown, *IIE Transactions* 31:10 (1999) 1001-1009.

"Combinatorial Optimization in a Cattle Yard: Feed Distribution, Vehicle Scheduling, Lot Sizing and Dynamic Pen Assignment", M. Dror and J. Leung, in G. Yu (ed.) *Industrial Applications of Combinatorial Optimization* (1998) p. 142-171.

"On the Boolean-Quadric Packing Uncapacitated Facility-Location Polytope", J. Hardin, J. Lee and J. Leung, *Annals of Operations Research*, 83 (1998) 77-94.

"Split-delivery Routing Heuristics in Livestock Feed Distribution", P.A. Mullaseril, M. Dror and J. Leung, *Journal of the Operational Research Society*, 48 (1997) 107-116.

"On the Two-level Facility Location Problem", K. Aardal, M. Labbe, J. Leung and M. Queyranne, *Informs Journal on Computing*, 8 (1996) 289-301.

"Devising a Cost-Effective Schedule for a Baseball League", R.A. Russell and J. Leung, *Operations Research*, 42 (1994) 614-625.

"Polyhedral Structure and Properties of a Model for Layout Design", *European Journal of Operational Research*, 77 (1994) 195-207.

"More Facets from Fences for Linear Ordering and Acyclic Subgraph Polytopes", J. Leung and J. Lee, *Discrete Applied Mathematics*, 50 (1994) 185-200.

"A Comparison of Two Edge-coloring Formulations", J. Lee and J. Leung, *Operations Research Letters*, 13 (1993) 215-223.

"A New Graph-Theoretic Heuristic for Facility Layout", *Management Science*, 38 (1992) 594-605.

"A Graph-Theoretic Heuristic for Designing Loop-Layout Manufacturing Systems", *European Journal of Operational Research*, 57 (1992) 243-252 (special issue on Facility Layout).

"Applying Polyhedral Combinatorics to Layout Design of Manufacturing Systems", Proceedings of *The 1991 NSF Design and Manufacturing Systems Conference* (1991) pp.719-728, Society of Manufacturing Engineers, Dearborn, Michigan.

"Routing in Point-to-Point Delivery Systems", J. Leung, T.L. Magnanti and V. Singhal, *Transportation Science*, 24 (1990) 245-260.

"Facets and Algorithms for Capacitated Lot Sizing", J. Leung, T.L. Magnanti, R. Vachani, *Mathematical Programming*, 45 (1989) 331-359.

"Valid Inequalities and Facets of the Capacitated Plant Location Problem", J. Leung and T.L. Magnanti, *Mathematical Programming*, 44 (1989) 271-291.

# BOOKS

*Urban Transport Analytics,* Proceedings of the 20<sup>th</sup> International Conference of the Hong Kong Society for Transportation Studies, J. Leung, Y.-H. Kuo and S. He (eds.), HKSTS, Hong Kong (2015).

*Tutorials in Operations Research: Bridging Data and Decisions*, A. Newman and J. Leung (eds.), Informs, Maryland, USA (2014).

*Transportation Systems: Engineering and Management*, Proceedings of the 12<sup>th</sup> International Conference of the Hong Kong Society for Transportation Studies, J. Leung, C.H. Cheng and Sin C. Ho (eds.), HKSTS, Hong Kong (2007).

# REFEREED BOOK REVIEWS

Book review of *Decision Aid Models for Disaster Management and Emergencies* by Vitoriano, Montero and Ruan (eds.) in *Interfaces*, 44:6 (2014) 627-630.

Book review of *Modelling and Analysis of Manufacturing Systems* by Askin & Standridge in *Interfaces*, 26:1 (1996) 144-145.

Book review of *Geometric Algorithms and Combinatorial Optimization* by Groetschel, Lovasz and Schrijver in *Journal of the Operational Research Society*, 40:8 (1989) 797.

# WORKING PAPERS/ TECHNICAL REPORTS

"Meta-heuristics for Dial-a-Ride Problems", W.H. Tou and J.M.Y. Leung (2015).

"A Police Patrol-beat Design Problem with Response-time and Contiguity Restrictions", A.S.F. Ng, S. Bain, J.M.Y. Leung and X. Cai (2010).

"The hoist scheduling problem for no-wait production lines: A survey of research", R.W.T. Mak, Y. Wong, J.M.Y. Leung, K. Lam and S.M. Gupta, Technical Report SEEM2000-05, (2000).

"A spectral approach to fence faces", J. Lee and J. Leung, working paper, (1993).

"Edge-coloring polyhedra", J. Lee and J. Leung, Technical report 90-01, Dept. of Operations Research, Yale University (1990).

"Facets of the balanced bipartition polytope", Working paper 108, Yale School of Organization and Management (1988).

## KEYNOTE/PLENARY TALKS:

"Public Transportation for Smart Cities", IFORS Distinguished Lecture, EURO 2021, Athens, July 2021.

"Humanitarian Logistics: Challenges, Models and Decision Support", Plenary talk, VII International Workshop on Locational Analysis and Related Problems, Malaga, Spain, 14-16 September, 2016.

"Humanitarian Logistics: Models and Challenges", Semi-plenary talk, *International Conference* on Operations Research – Optimal Decisions and Big Data (OR2015), Vienna, 1-4 Sept, 2015.

"Workforce Scheduling: Models, Methods and Future Challenges", Keynote Speech, *International Symposium on Scheduling 2013 (ISS2013)*, Tokyo, July 2013.

"Timetable synchronisation for mass transit" (in Putonghua), Plenary Talk, 10<sup>th</sup> National Conference, Operations Research Society of China, Beijing, Oct 2010.

#### **OTHER INVITED/REFEREED PRESENTATIONS**

"A Graph-based Formulation for Shift Rostering Problems", Nanzan University, Nagoya, Japan, December 2018; International Symposium on Scheduling, Matsue, Japan, July 2019.

"On the Mixed Set Covering, Packing and Partitioning Polytope", Nanzan University, Nagoya, Japan, December 2018; ECCO XXXII, Malta, May 2019.

"Real-Time Re-scheduling for Tramway Operations", Workshop on Urban Operations Research, Nagoya, Japan, 8-9 December, 2018.

"Real-time Re-scheduling for Public Transit", *Production and Operations Management Society International Conference*, Granada, Spain, October, 2018; *ROUTE-International Workshop on Vehicle Routing, Intermodal Transportation and Related Areas*, Snekkersten, Denmark, May, 2018.

"Big Data Analytics for Health Care", Forum on Big Data Research and Practice, Guangzhou, China, December, 2017.

"Real-time Integrated Re-scheduling for Public Transit", Third International Conference on Railway Technology (RW2016), Cagliari, Sardinia, April, 2016.

"Disruption Management in Public Transport in Hong Kong", AIMMS Asia Pacific Optimization 2016, Suzhou, April, 2016.

"Single-item repairable inventory system with new and warranty demand", International Symposium on Scheduling (ISS 2015), Kobe, July, 2015.

"The p-median Problem with Concave Costs", 3<sup>rd</sup> International Conference on Operations Research and Enterprise Systems (ICORES 2015), Lisbon, January, 2015.

"Real-Time Integrated Vehicle and Crew Scheduling Using Big Data", Academic Symposium on Big Data, National Natural Science Foundation of China, Hong Kong, Sept 2014.

"On the Mixed Odd Hole Polytope", ISCO, Lisbon, March 2014.

"From Preparedness to Recovery: A Tri-level Programming Model for Disaster Relief Planning", ICCL conference, Copenhagen, 2013; LRI, Paris, 2013; HKUST, 2015; EURO Glasgow, 2015.

"Game Theoretic Models for Competition in Public Transit Services", University of Southampton, June 2008; ETH Zurich, July, 2009; IMA Maths and Transport conference, London, Apr 2010; ALIO-Informs, Buenos Aires, June 2010; TRISTAN VII, Tromso, Norway, June 2010; APORS, Penang, 2010; IFORS, Melbourne, 2011; Informs, Charlotte, 2011; Leeds University, 2013.

"Timetable synchronisation for mass transit", CORS/SCRO-Informs International, Banff, 2004; 9<sup>th</sup> CASPT, San Diego, 2004; INFORMS Denver, 2004; IEE International Conference on Railway Engineering, Hong Kong & Shenzhen, 2005; 2<sup>nd</sup> Multidisciplinary International Conference on Scheduling: Theory & Applications, New York, 2005; 4<sup>th</sup> IMA International Conference on Mathematics in Transport, London, 2005; OR48 conference, Bath, 2006; *TRISTAN VI*, Phuket, June, 2007; Institute of Mathematics and its Applications (Scottish Branch), 2008; Institute for Transport Studies, Leeds University, 2008; UC-Berkeley, 2009; National Dong Hwa University, Hualian, 2011; Sophia University, 2013; Kobe University, 2013; Osaka University, 2013.

"A column-generation approach to crew rostering using prohibited shift-sequences", International Conference on Operations Research, Zurich, Sept 2011.

"Science & Technology for Informed Decision Making", Public Lecture Series for Secondary Schools, The Chinese University of Hong Kong, 2010.

"Manpower scheduling for airline catering using tabu search", Informs Seattle, 2007; Operational Research Society Conference, York, 2008.

"Logistics & Supply Chain Management in China: Trends and Challenges", i2 Innovation Workshop, Dallas, October, 2006; Napier University, April 2008.

"On the uncapacitated K-commodity network design problem with zero flow costs",

Combinatorial Optimisation (CO2004), Lancaster, 2004; Triennial IFORS Meeting, Waikiki, Hawaii, 2005.

"On a vehicle routing problem with time windows and stochastic travel times", 10<sup>th</sup> International Conference of the Hong Kong Society for Transportation Studies, December, 2005.

"An efficient algorithm for multi-hoist cyclic scheduling with fixed processing times", International Conference of Management Science & Applications, Chengdu, June, 2005.

"Min-up/Min-down polytopes", 18<sup>th</sup> International Symposium on Mathematical Programming, Copenhagen, August, 2003.

"Logistics Challenge of Customisation", Executive Seminar on *Car Distributor and Dealer: Supply Chain Management Strategy*, Centre for Advancement of E-Commerce Technologies, The Chinese University of Hong Kong, January, 2003.

"Decision Support Technologies for Logistics", Judge Institute of Management, Cambridge, 2003.

"Configuring a Manufacturing Firm's Supply Network with Multiple Suppliers", National University of Singapore, 2002; Decision Sciences Department, CUHK, 2002; Operations Research Group, Hong Kong University, 2002; Hong Kong University of Science and Technology, 2002.

"Map-based logistics support with dynamic routing", *TRISTAN IV*, Ponta Delgada, June, 2001; The Logistics Institute – Asia Pacific, Singapore, March, 2002; IFORS Edinburgh, July, 2002; ICGSCM'02, Beijing, August, 2002.

"Decision Support for Logistics Planning", *Freight Forwarders' Key to Success: E-Logistics* seminar, Hong Kong, August, 2001.

"A Polytope for a Product of Real Linear Functions in Zero-One variable", INFORMS meeting, Philadelphia, November, 1999; International Conference on Numerical Optimization and Numerical Linear Algebra, Dunhuang, China, May, 2001.

"Hoist Scheduling for Printed Circuit Board Manufacturing: A Mixed Integer Programming Approach", Hong Kong University of Science and Technology, 1997; Informs San Diego, 1997; 5<sup>th</sup> Twente Workshop on Graphs and Combinatorial Optimization, Enschede, Netherlands, 1997; International Symposium on Mathematical Programming, Lausanne, Switzerland, 1997; Combinatorial Optimisation'98, Brussels, 1998; Chinese University of Hong Kong, 1998; International Symposium on Decision Sciences, Shatin, 1998; CORE, Louvain-la-Neuve, 2000; International Workshop on Operations Research, Beijing, 2001; IP lunch, IBM Research, Yorktown Heights, 2001; Informs Meeting, Miami Beach, 2001.

"Challenges in Transition to E-Commerce for Small and Medium Sized Enterprises", Institute of Systems Engineering, Huazhong University of Science and Technology, February, 2000; *E-Commerce Forum for SMEs*, organised by Information Technology and Services Department, Hong Kong Government, March, 2000.

"Logistics Management in a Container Yard", Industrial Engineering Research Conference, Phoenix, May, 1999.

"Supply Chain Management and Design: Some Models, Issues and Challenges", SEEM Dept., Chinese University of Hong Kong, June, 1998; City University of Hong Kong, April, 1999.

"On the Simple Plant location Problem with Quadratic Costs", 2nd Workshop on Models and Algorithms for Planning and Scheduling Problems, Wernigerode, Germany, May, 1995; Symposium on Combinatorial Optimization (CO96), London, March 1996; International Symposium On Operations Research and Applications ISORA'96, Guilin, December, 1996.

"Routing and Scheduling for Livestock Feed Distribution", ORSA TECMAN conference, Pittsburgh, 1994; Informs Los Angeles, 1995; TIMS XXXI Singapore, 1995; HKUST, 1996.

"A Graph-theoretic Heuristic for Designing Loop-layout Manufacturing Systems", Mathematics Dept., University of Arizona, October 1995.

"Devising a Cost-Effective Schedule for a Baseball League", University of Arizona, 1994.

"Discrete Deterministic and Stochastic Blending Problems with Two Quality Characteristics", XV International Symposium on Mathematical Programming, Ann Arbor, August 1994; SIE Dept., University of Arizona, September, 1994.

"On the Two-level Uncapacitated Facility Location Problem", XV International Symposium on Mathematical Programming, Ann Arbor, August 1994; ORSA/TIMS Detroit, October, 1994.

"On the Boolean Quadric Forest Polytope", TIMS XXXII, Anchorage, June 1994.

"Capacity Planning Models for Service Systems", Medical and Biological Engineering Workshop Series, University of Arizona, May 1994.

## EDITORIAL SERVICE

2020 2024	Series Co-Editor, Cambridge Elements in Transport Economics
<b>2020</b> Editor <i>Research</i>	ial Board, TOP-Journal of the Spanish Society of Statistics and Operations
1996-1999; 2018	Associate Editor, Operations Research
2015	Associate Editor, Public Transport
2015	Associate Editor, Transportmetrica B: Transport Dynamics
2014	Associate Editor, OMEGA
2011	Associate Editor, EURO Journal on Transportation and Logistics
2011	Editorial Board, EURO Journal on Computational Optimization
2009	Associate Editor, Transportation Science
2008	Editorial Board, International Transactions in Operational Research
2005	Associate Editor, Transportmetrica
2001	Associate Editor, Naval Research Logistics
2016-2019 2005-2016	Editorial Advisory Board, Computers and Operations Research Area Editor, Computers and Operations Research
2005-2007	Co-editor, Special Issues for the Hawaii IFORS conference International Transactions in Operational Research (ITOR)
2001-2009	Associate Editor, IIE Transactions on Scheduling and Logistics
1996-2005	Editorial Board, Manufacturing & Service Operations Management

## **PROFESSIONAL ACTIVITIES**

Quality Assurance Committee, Chartered Institute of Logistics and Transport for Hong Kong (2008-2012, 2014-present).

Panelist, *Career for Female Scholars*, 11th Annual International Conference of the Chinese Scholars Association for Management Science and Engineering (CSAMSE) Ningbo, China, (2018).

Regional Vice President Australasia, Production and Operations Management Society (2016-18)

Founding President, Production and Operations Management Society - Hong Kong Chapter (2009-2011).

Committee member, Kuhn Award, Naval Research Logistics (2008).

Committee on *Global Strategy* for the Production and Operations Management Society (POMS), to recommend strategies for global outreach for POMS (2008).

Committee Chair, Best Paper Award, IIE Transactions -Scheduling and Logistics (2007).

Technical Advisory Board, i2 Technologies, Inc. (2006-2008).

Invited panelist, Science Career Workshop sponsored by the Advisory Board of Women in Science and Engineering (1993).

## INFORMS:

Chair/member, Saul Gass Expository Writing Prize Award Committee (2018-2020).

Transportation Science and Logistics Society Best Paper Award (Chair 2011; member 2016)

Transportation Science and Logistics Society Asia-Pacific Liaison (2008-2011).

Committee member, Robert Herman Lifetime Achievement Award (2009, 2019)

Committee member, Award for the Advancement of Women in OR/MS (2008)

President, Informs Forum on Women in OR/MS (2001-2002)

Chair, Student Affairs Committee (2000-2004)

Committee Member, Education Committee (2002-04),

Committee member, Marketing Strategy Committee (2001-04)

Nominated for election as Vice-President for Membership and Professional Recognition on the Board of Directors (2003)

Judging Panel, Informs Case Competition (San Antonio, 2000; San Jose, 2002).

Informs Joint Doctoral/Teaching/Practice Colloquium Task Force (2001).

Judging Panel, Student paper competition, Manufacturing and Service Operations Management Society, INFORMS (1999).

Informs Task Force on the Recruitment and Retention of Young Professionals and Students (1997)

VP-Meetings, Informs Forum on Women in OR/MS (1995-97)

Vice Chair - Network flows, Informs Optimization Section (1997-99)

## Conference Organization:

## Chair of Programme/Organising Committee:

Co-chair, 6th INFORMS Transportation Science and Logistics Society Workshop, "E-Commerce and Urban Logistics", Hong Kong, January 8-10, 2018.

20th Hong Kong Society for Transportation Studies (HKSTS) Conference, Dec, 2015.

19<sup>th</sup> Triennial Conference of the International Federation of Operational Research Societies (IFORS'2011), Melbourne, July, 2011.

Co-chair, 11th International Conference on Advanced Systems for Public Transport (CASPT), 2009.

Sponsored Sessions Chair, Informs International Meeting, Hong Kong, June 2006.

12<sup>th</sup> Hong Kong Society for Transportation Studies (HKSTS) Conference, Dec, 2007.

Initiator and Organising Committee Chair, International Conference on "Global Supply Chain Management: Into the 21<sup>st</sup> Century", CUHK, August, 1999.

## Conference Area/Cluster chair/co-chair:

*Discrete Optimization, Mixed Integer and Constraint Programming* Area, 22nd Triennial Conference of the International Federation of Operational Research Societies (IFORS'20), Seoul, Korea, 21-26 June, 2020; *Discrete Optimization, Mixed Integer Programming* Area, 21<sup>st</sup> IFORS, Quebec City, Canada, 17-21 July, 2017; *Transportation Cluster*, 17<sup>th</sup> IFORS, Honolulu, July, 2005; *Logistics and Supply Chain Management* Cluster, 15<sup>th</sup> IFORS, Beijing, August, 1999.

*Transportation and Logistics (TSL) Sponsored Cluster* Chair, Informs International Conference, Taipei, 2018; International Informs Conference, Puerto Rico, July, 2007.

Tutorials Co-Chair, Informs Meeting, San Francisco, 2014.

*Network Flows and Combinatorial Optimisation*, Informs Philadelphia, November, 1999; ; Informs Cincinnati, May, 1999; Informs Seattle, November, 1998; ORSA/TIMS Joint National Meeting, New Orleans, November, 1995; ORSA/TIMS Joint National Meeting, Phoenix, November, 1993.

#### Conference Organising /Scientific/Programme Committee:

Conference on Advanced Systems in Public Transport (*CASPT*) Tel-Aviv, Oct. 2021; 14th CASPT, Rotterdam, 2015; 12<sup>th</sup> CASPT, Hong Kong 2009.

International INFORMS/ALIO/ASOCIO conference, Medellin, Columbia, June 2021.

International Conference on Computational Logistics, Twente, Sept. 2020; 7<sup>th</sup> ICCL, Lisbon, 2016; 6<sup>th</sup> ICCL, Delft, 2015; 5<sup>th</sup> ICCL, Copenhagen, 2014.

International Conference on Information Systems, Logistics and Supply Chain (ILS), 8<sup>th</sup> ILS, Austin, Texas, 2020; 7<sup>th</sup> ILS, Lyon, 2018; 6<sup>th</sup> ILS, Bordeaux, 2016; 5<sup>th</sup> ILS, Breda, 2014; 1<sup>st</sup> ILS, Lyon 2006.

International Conference on Operations Research and Enterprise Systems (ICORES), 9<sup>th</sup> ICORES, Malta, 2020; 8<sup>th</sup> ICORES, Prague, 2019; 7th ICORES, Porto, 2017; 6th ICORES, Rome 2016; 5th ICORES, Lisbon 2015; 4th ICORES, Angers, 2014; 3rd ICORES, Barcelona, 2013.

International Symposium on Scheduling (ISS) Matsue 2019; Nagoya, 2017; Kobe, 2015.

Triennial Symposium on Transportation Analysis IX, Aruba, 2016; TRISTAN VII, Tromsø, Norway, 2010; TRISTAN VI, Phuket, Thailand, 2007; TRISTAN V, Guadeloupe (French West Indies), June, 2004.

Transportation Science and Logistics Society (TSL) Workshop, Atlanta 2016.

International Conference on Mobile Web and Intelligent Information Systems (MobiWis) Vienna, 2016.

Production and Operations Management Society – Hong Kong Chapter International Conference, 7<sup>th</sup> POMSHK, 2015; 6<sup>th</sup> POMSHK, 2014; 5<sup>th</sup> POMSHK, 2013; 4<sup>th</sup> POMSHK, 2012; 3<sup>rd</sup> POMSHK, 2011; 2<sup>nd</sup> POMSHK, 2010; 1<sup>st</sup> POMSHK, 2009.

International Federation of Operational Research Societies, 20<sup>th</sup> IFORS, Barcelona, 2014; 18<sup>th</sup> IFORS, South Africa, 2008; 17<sup>th</sup> IFORS, Hawaii, 2005.

Production and Operations Management Society conference, Chicago, 2012.

18th International Symposium on Transportation and Traffic Theory (ISTTT18), Hong Kong, July, 2009.

The Fifth International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization Problems (CPAIOR), Paris, France, May, 2008.

7<sup>th</sup> Workshop on Algorithmic Approaches for Transportation Modeling, Optimization, and Systems (ATMOS), Sevilla, Spain, November, 2007.

International Network Optimisation Conference (INOC), Spa, Belgium, April, 2007.

19<sup>th</sup> International Chinese Transportation Professionals Association Annual meeting, Hong Kong – Macau, May, 2006.

International Conference on Global Supply Chain Management, Beijing, August, 2002.

5<sup>th</sup> International Conference on Optimization Techniques and Applications (*ICOTA*), Hong Kong, December, 2001.

## Conference Advisory/Steering Committee:

POMS-Hong Kong International Conferences: 11<sup>th</sup> POMSHK, 2020; 10<sup>th</sup> POMSHK, 2019; 8<sup>th</sup> POMSHK 2017; 7<sup>th</sup> POMSHK, Macau, 2016. Tsinghua-POMS Workshop, 2018. POMS International Conference, Sydney, 2017.

4<sup>th</sup> Annual ISB-POMS Research Workshop, Hyderabad, India, 2016.

# Professional society memberships:

Mathematical Programming Society Institute for Operations Research and the Management Sciences (INFORMS) Production and Operations Management Society (POMS) Chartered Institute of Logistics and Transport – Hong Kong

## Refereeing and Review activities:

Reviewer for: National Science Foundation (USA) Hong Kong Research Grants Council (Engineering Panel, Humanities, Social Science and Business Studies Panel) Research Council of Norway Research Council KU Leuven University of Arizona (Small Grants Program)

Refereed over 500 articles for leading journals in the field.

# ACADEMIC SERVICE

Advisory Committee Member, BBA (Honours) in Supply Chain Management Programme (BBA-SCM) Programme, Hang Seng Management College (2013- present)

Panel member (Engineering), Hong Kong Research Grants Council (2011-2016).

External Examiner, Business Programmes, Lingnan University (2009 – 2010)

External Assessor, The University of Leuven (2009)

Advisory Committee, Logistics Research Centre, Department of Logistics, Faculty of Business, Hong Kong Polytechnic University (2006 – 2008)

Lecturer, "Planning Models & Methods for Logistics Systems", Summer Engineering Academy, The Chinese University of Hong Kong, August, 2007.

Chair, Selection Interview Board 3 (Fellowships), Sir Edward Youde Memorial Fellowships and Scholarships (2006-07).

Programme Validation Panel, M.Sc./Ph.D. in Global Supply Chain Management, Graduate School of Business, Polytechnic University of Hong Kong (2004)

# COMMUNITY/ PUBLIC SERVICE

Member, Subcommittee on Infrastructural Support (SIS), Hong Kong Logistics Development Council (LOGSCOUNCIL) (2014 to 2019)

Member, Subcommittee on Marketing and Promotion (SMP), Hong Kong Logistics Development Council (LOGSCOUNCIL) (2014 to 2019)

Panel discussant, Harvard Club of Hong Kong (2017).

Guest of Honour and High Table Dinner Speaker, Shaw College, The Chinese University of Hong Kong (2017)

Guest of Honour and Graduation Speaker, Sacred Heart Canossian College of Commerce (2014)

Member, Governing Board, Sacred Heart Canossian College of Commerce (2009 to 2014)

Public Lecture, "Science & Technology for Informed Decision Making", Public Lecture Series for Secondary Schools, The Chinese University of Hong Kong, 2010.

Vetting Panel member, *Youth Business Hong Kong*, Hong Kong Federation of Youth Groups (2006, 2007).

Invited speaker, "Career Paths to Logistics" seminar for secondary school teachers and students, organized by the Logistics Development Council, HKSAR (2005, 2006).

Selection Committee, Swire/Chevening, Swire/Cathay Pacific and J.K. Swire Memorial Scholarships (2006).

Public Lecture, "Information Communications Technologies and Global E-Commerce", Faculty of Social Science, The Chinese University of Hong Kong, December, 2005.

Judge, Business Plan Competition, LiveWIRE Hong Kong, 2004 (organized by Shell Hong Kong Ltd. and the Hong Kong Federation of Youth Groups).

Consultant (pro bono) to the Hong Kong Trade Development Council for the theme and central display design for the *Hong Kong Logistics Services Expo*, Guangzhou (2002, 2004).

Selection Board member, Sir Edward Youde Memorial Scholarships (2002-03).

Project demonstration: "Logistics Support for Mobile Commerce", Tenth Anniversary IT Fair, Faculty of Engineering, The Chinese University of Hong Kong, November, 2001; Innovation Expo, organised by the Innovation and Technology Commission, HKSAR, November, 2001; Internet and Networking Systems Interest Group of the Hong Kong Computer Society, May, 2002.

Invited speaker, *E-Commerce Forum for Small and Medium Enterprises*, organised by Information Technology and Services Department, HKSAR Government (2000).

# CONSULTANCY PROJECTS

2016-17	Hong Kong Air Cargo Terminals Limited (HACTL) Ground Services Ramp Job Assignment Optimisation.
2014-17	Hong Kong Tramways Limited. (Sponsored Research, HK\$410,000) Integrated Planning for Tramway Operations.
2003	LSG SkyChefs (Hong Kong) Limited. Re-engineering of production process, and manpower scheduling for delivery operations.
2002-03	Mass Transit Railway (Hong Kong) Limited. Train scheduling to minimize waiting time at interchange stations.
1998	Commercial Press (Hong Kong) Limited. Order Fulfilment and Delivery Process.
1997-98	Mid-Stream Holdings (Hong Kong) Limited. Developed an on-line <i>Repair Approval, Tracking and Estimate System (RATES)</i> for container repair service.
1994	McElhaney Cattle Company, Arizona. Feed production and delivery planning for a cattle feedyard.

#### **COURSES TAUGHT**

#### MBA/M.Sc. level:

The Chinese University of Hong Kong: Logistics Management Manufacturing & Service Operations Management Supply Chain Management Principles of Engineering Management (Decision Modelling)

City University of Hong Kong:

Operations Management Operations Research (Co-ordinator of the Faculty of Business Innovative Learning Initiative, to encourage the faculty to develop cases and innovative media for learning.)

#### University of Arizona:

Management and Evaluation of Information Systems Computer Models for Operations Management (Nominated for the Faculty of the Year Award by the MBA class of 1995 of the Karl Eller Graduate School of Management, University of Arizona.)

#### Yale University:

Quantitative Analysis for Management Decisions (including Statistics)

#### Undergraduate level:

The Chinese University of Hong Kong, Shenzhen: Applied Calculus and Linear Algebra Graph Theory

The Chinese University of Hong Kong:

Energy Economics and Management
Engineering and Technology Management
Supply Chain Management
Logistics Management
Engineering Innovation and Entrepreneurship
Applied Probability and Statistics
Linear Algebra and Discrete Mathematics

#### City University of Hong Kong:

Decision Modelling I

Management Sciences I & II (Developed course syllabus and drafted course materials for FB1200/1201, the core required course for all undergraduates of the Faculty of Business.)

## University of Arizona:

**Basic Operations Management** 

#### Yale University: Introduction to Management Sciences I & II

## Ph.D./M.Phil. level:

The Chinese University of Hong Kong: Integer Programming Engineering Management Strategy Logistics and Transportation Planning University of Arizona: Models for Quantitative Analysis Networks and Scheduling Mathematical Programming and Applications Yale University: Graphs and Network Flows Polyhedral Combinatorics

#### POSTGRADUATE SUPERVISION

#### Ph.D. Supervision:

Ada S.F. Ng, (co-supervised with Prof. X.Q. Cai), degree awarded 2002. Thesis: "Network Design: Districting and Multi-commodity Flow Problems". *Assistant Professor at the University of Sydney*.

Jacky C.F. Wong, degree awarded May, 2007.

Thesis: "Delivery Planning Under Uncertainty in Logistics and Express Industry". *FedEx Corporation.* 

Yong-hong Kuo, degree awarded August, 2013.

Thesis: "From a Multi-Skilled Staff-Scheduling Problem to a Mixed Set Covering, Packing and Partitioning Polytope".

Assistant Professor, Hong Kong University.

Yizhong Lin, degree awarded December, 2013.

Thesis: "Optimization of a Single-Item Repairable Inventory System with New and Warranty Demand".

Assistant Professor at Jiaxing University.

David Lai Shu-wo, degree awarded August, 2014. Thesis: "Manpower and Transportation Planning". Assistant Professor at VU University Amsterdam.

Terence Tou Weng Hei, degree awarded 2016.

Thesis: "Metaheuristics for Solving Variants of Vehicle Routing Problems". *FedEx Corporation.* 

#### M.Phil. Supervision:

Jacky C.F. Wong, degree awarded April, 2002.

Thesis: "Routing and Delivery planning: Algorithms and System Implementation"

Mandy M.K. Yau, degree awarded June, 2002.

Thesis: "The Hong Kong Logistics Industry and A Study of Inventory Management Models with Advance Ordering"

Rachel C.W. Wong, degree awarded July, 2004.

Thesis: "Timetable Synchronization for Mass Transit"

Lau Wai Hung, degree awarded August, 2006.

Thesis: "Static Image-based Traffic Monitoring System"

Chen Jian, degree awarded February, 2007.

Thesis: "On a Vehicle Routing with Time Windows and Stochastic Travel Times" Eddie Chan, degree awarded 2008.

Thesis: "Public Transit Network Design for Competitive Service Providers"

Kuo Yong Hong, degree awarded 2010.

Thesis: "Manpower Allocation Problem with Heterogeneous Skills" Cheung Kwan-Wing, degree awarded 2010.

Thesis: "Beer Logistics: A Wholesaler's Delivery Problem"

# ADMINISTRATIVE RESPOSIBILITIES (University of Macau)

Master, Choi Kai Yau College Member, Working Group on Residential College Affiliation (of teaching faculty)

# ADMINISTRATIVE RESPOSIBILITIES (CUHK-Shenzhen) (2016-2019)

Master, Shaw College Member, University Executive Board Member, University Committee on Teaching and Learning Member, University Committee on Scholarships and Financial Aid Member, School Board, School of Science and Engineering Member, Committee on Tenure, School of Science and Engineering

# ADMINISTRATIVE RESPOSIBILITIES (CUHK) (1998-2016)

## Service to Department

Responsible for the design of the current curriculum structure, played leading role in curriculum design and accreditation.

Department Curriculum Committee (Chair 1999-2002, 2013-2016; Member 1998, 2003; 2013)

Co-Chairman, Department Quality Teaching & Accreditation Committee (2004 - 2013)

Department Teaching and Learning Committee (2013 to 2016)

Department Academic Personnel Committee (2014 to 2015)

Chairman, Accreditation Task Force (2004 - 2007)

Led effort to obtain accreditation for the SEEM undergraduate programme Logistics and Supply Chain Management Stream from the Chartered Institute of Logistics and Transport in Hong Kong.

## Service to College

## **Morningside College**

Emeritus Fellow (2020 -- ) College Planning Committee (2006 – 2009) Deputy College Master (2009 to 2016) Dean of Students (2009 to 2016) Warden (2011 to 2016) Founding Fellow (2009 to 2016) Chair, Admissions and Financial Aid Committee (2009 to 2016)

#### Shaw College

Assembly of Fellows (Elected), Shaw College (2007 - 2012) College Life Promotion Committee (2004 - 2009) Shaw College Staff Association, (President, 2006 - 07; Exco member, 2007 - 09) Environmental Enhancement Committee Member (1999 - 2009)

#### Service to University

Chairman, Programme Review (Light Review) for Professional Accountancy Programme (2012) Chairman, Programme Review (Light Review) for Liberal Studies (2011 - 2012) Chairman, Programme Review (Light Review) for Linguistics Programme (2011) Chairman, Programme Review (Light Review) for Modern Languages Programme (2011) Chairman, Programme Review Committee for Biology Programme (2009) Member, Programme Review Committee for Philosophy Programme (2010) Member, Programme Review Committee for Theology Programme (2010) Member, Programme Review Committee for Cultural Studies Programme (2008) Member, Programme Review Committee for the English Department (2007) Committee on Student Internationalization (2013 to 2016) College Representative, Senate Committee on Physical Education (2010 to 2016) College Representative, Senate Staff-Student Consultative Committee (2011 to 2016) College Representative, Senate Committee on University Scholarships (2011 to 2016) College Co-ordinator, Committee on Health Promotion and Protection (2010 to 2016) Committee on Student Development Portfolio (2012 to 2013) Lecturer, Science & Technology for Informed Decision Making, Public Lecture Series for Secondary Schools (2010) Member, Task Force on Four-year Normative Curriculum, Subgroup on Student Support & *Development* (2010 - 2011) Advisory Committee Member, Research Centre for Human Values of Faculty of Arts (2010 -2011) Member, Committee on Psychological Counselling Services (2010 - 2011) Working Group on Language Enhancements (2006-2008)

University Writing Committee (2003 – 2005)

Updated 20th January, 2021