DR. SZETO, WAI YUEN

PERSONAL DATA

Contact Information

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http://orcid.org/0000-0001-7059-3532

http://www.researcherid.com/rid/E-9886-2010

https://www.researchgate.net/profile/W_Szeto

https://scholar.google.com/citations?user=N3IuhzIAAAAJ



http://hub.hku.hk/cris/rp/rp01377/bibliometrics.htm

ResearcherID (ISI): 20

Scopus: 20

Google Scholar Citations: 27

Professional Affiliations

- *Member*, The Hong Kong Institution of Highways and Transportation (MHKIHT), 2014–present.
- *Member*, The Chartered Institute of Logistics and Transport (MCILT), 2006–present.
- *Member*, The Chartered Institution of Highways and Transportation (MCIHT), 2006–present.
- *Member*, The Institute of Electrical and Electronics Engineers (MIEEE), 2006–present.
- Member, The Hong Kong Society for Transportation Studies (MHKSTS), 2006
 –present.
- *Member*, The Institution of Engineers of Ireland (MIEI), 2006–2008.

Education

- The Hong Kong University of Science and Technology (HKUST)
 - Ph.D. (Civil Engineering), 2000–2003.
 - Master of Philosophy (Civil Engineering), 1998–2000.
 - Bachelor of Engineering (Civil and Structural Engineering), 1995–1998.



Working Experience

• *Deputy Director*, Institute of Transport Studies, The University of Hong Kong, 1 Jul 2014–present.

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- Associate Professor, Department of Civil Engineering, The University of Hong Kong, 1 Jan 2016–present
- Assistant Professor, Department of Civil Engineering, The University of Hong Kong, 14 Dec 2009–31 Dec 2015.
- Assistant Professor, Department of Civil Engineering, The National University of Singapore (NUS), 2 Jul 2007–12 Dec 2009.
- Lecturer in Transportation Engineering, Department of Civil, Structural, and Environmental Engineering, Trinity College Dublin, 16 Aug 2004–30 Jun 2007. (became a permanent lecturer in Nov 2006)
- *Visiting Scholar*, Department of Civil Engineering, HKUST, 1 Aug 2005–15 Sep 2005.
- Post-doctoral Fellow, Department of Civil Engineering, HKUST, 1 Sep 2003– 14 Aug 2004.
- Research Assistant, Department of Civil Engineering, HKUST, 1 Jun 1998–31 Aug 1998.

RESEARCH AND SCHOLARSHIP

Awards

A. Research Awards

- 1. The 1st Runner-up of the Chartered Institute of Logistics and Transport in Hong Kong (CILTHK) Student Day Project Competition (1999)
- 2. The World Conference on Transport Research (WCTR) Prize (2001)
 - The best paper "A Cell-based Dynamic Traffic Assignment Model", out of about 700 papers presented at (or 1100 abstracts submitted for) the 9th Triennial WCTR Conference in 2001.
- 3. The 2nd Runner-up of the Graduates & Students Division of the Institution of Civil Engineers, Hong Kong Association (G&S/ICE HKA) Paper Competition (2002)
- 4. The Hong Kong Society for Transportation Studies (HKSTS) Outstanding Student Paper Award (2003)
 - The best student paper "Network Improvement Strategies across Time", out of all the student papers submitted for the 8th Annual HKSTS Conference in 2003.
- 5. The Eastern Asia Society for Transportation Studies (EASTS) Outstanding Paper Award (2003)
 - The outstanding paper "Time-dependent Transport Network Design: A Study of Budget Sensitivity", out of about 460 papers presented at (or 800 abstracts submitted for) the 5th Biannual EASTS Conference in 2003.

6. The HKSTS Outstanding Dissertation Paper Award and Gordon Newell Memorial Prize (2005)

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- 7. The Hong Kong Institution of Engineers (HKIE) Outstanding Paper Award for Young Engineers/Researchers (2008)
- 8. Engineering Overseas Visitor Programme Fellowship, Faculty of Engineering, the University of Hong Kong (2009-2010)
- 9. Honor of Individual Award of Shenzhen Virtual University Park for National Research Project, the Shenzhen Municipal Science and Technology Innovation Council (2012)
- 10. Honor of Individual Award of Shenzhen Virtual University Park for National Research Project, the Shenzhen Municipal Science and Technology Innovation Council (2013)

B. Academic Awards

- 1. The HKUST Dean's List Award (Spring Semester, 1998)
- 2. The HKUST Postgraduate Studentship (1998–2003)
- 3. Sir Edward Youde Memorial Fellowship (2001–2002)
 - Out of all the postgraduate students in Hong Kong in 2000.
- 4. Sir Edward Youde Memorial Fellowship Renewal (2002–2003)
 - Out of all the Sir Edward Youde Memorial Fellowship recipients in 2001.

C. Service Awards

- 1. Certificate of Excellence in Reviewing, Transportation Research Part B, 2013.
- 2. Certificate of Excellence in Reviewing, Transportation Research Part C, 2013.

D. Who's Who

Biography has been listed in Who's Who in the World® 2015 (32nd Edition).

Editorship

A. Editors/Area Editors

- 1. *Editor*, Open Engineering (the former Central European Journal of Engineering), Springer, 2011–present.
- 2. *Editor*, Proceedings of the 16th International Conference of Hong Kong Society for Transportation Studies, Hong Kong Society for Transportation Studies, 2011.
- 3. *Editor in Asian Region*, International Journal of Transportation, Science & Engineering Research Support Society (SERSC), 2012–present.
- 4. *Area Editor (Sustainability)*, Networks and Spatial Economics (Impact Factor = 1.803), Springer, 2015–present.

B. Associate Editors

- 1. *Associate Editor*, Transportmetrica A: Transport Science (formerly known as Transpormetrica, Impact Factor = 2.068), Taylor & Francis, 2012–present.
- 2. Associate Editor, Transportmetrica B: Transport Dynamics (split from Transportmetrica) (Impact Factor = 2.417), Taylor & Francis, 2013–present.
- 3. Associate Editor, Travel Behaviour and Society, Elsevier, 2013–present.
- 4. *Associate Editor*, Journal of Intelligent Transportation Systems: Technology, Planning, and Operations (Impact Factor = 1.250), Springer, 2014–present.
- 5. Associate Editor, The 13th International IEEE Annual Conference on Intelligent Transportation Systems, IEEE Press, 2010.

- 6. Associate Editor, The 14th International IEEE Annual Conference on Intelligent Transportation Systems, IEEE Press, 2011.
- 7. *Associate Editor*, The 16th International IEEE Annual Conference on Intelligent Transportation Systems, IEEE Press, 2013.
- 8. *Associate Editor*, The 17th International IEEE Annual Conference on Intelligent Transportation Systems, IEEE Press, 2014.
- 9. *Associate Editor*, The 18th International IEEE Annual Conference on Intelligent Transportation Systems, IEEE Press, 2015.

C. Guest Editors

- 1. *Guest Editor*, Journal of King Saud University-Science, Special Issue on Advances in Transportation Science, Elsevier, 2011.
- 2. *Guest Editor*, Asian Geographer, Special Issue on Transport Geography in Asia, Taylor & Francis, 2013.
- 3. Guest Editor, Journal of Intelligent Transportation Systems: Technology, Planning, and Operations, Special Issue on Dynamic Modeling for Intelligent Transportation System Applications (Impact Factor = 1.250), Taylor & Francis, 2014.
- 4. *Guest Editor*, International Journal of Transportation, Special Issue on Recent Advances in Metaheursitics for Solving Transportation and Logistics Problems, Science & Engineering Research Support Society, 2014.
- 5. *Guest Editor*, Transportmetrica A, Special Issue on Quantitative Approaches to Resilience in Transportation Networks (Impact Factor = 2.068), Taylor & Francis, 2015.
- 6. *Guest Editor*, Networks and Spatial Economics, Special Issue on Quantitative Approaches to Environmental Sustainability in Transportation Networks (Impact Factor = 1.803), Springer, 2015.
- 7. Guest Editor, International Journal of Sustainable Transportation, Special Issue on Sustainability in Transportation Networks (Impact Factor = 1.447), Taylor & Francis, 2015.
- 8. *Guest Editor*, Transportmetrica B, Special Issue on Smart Transportation and Analytics (Impact Factor = 2.417), Taylor & Francis, 2016.

D. Editorial Board Members

- 1. *Editorial Board*, Asian Transport Studies, Eastern Asia Society for Transportation Studies (EASTS), 2010–2014.
- 2. *Editorial Board*, International Journal of Traffic and Transportation Engineering, Scientific & Academic Publishing, 2011–present.
- 3. *Editorial Board*, International Journal of Sustainable Transportation (Impact Factor = 1.447), Taylor & Francis, 2012–present.
- 4. *Editorial Board*, Journal of Advanced Transportation (Impact Factor = 1.878), Wiley, 2013–present.
- 5. *Editorial Board*, Applied Scientific Reports, Herbert Publications, 2013–present.
- 6. Editorial Board, The Scientific World Journal, Hindawi, 2013–present.
- 7. *Editorial Board*, International Journal of Transportation Science and Technology, Multi-Science Publishing, 2013–present.
- 8. Editorial Board, Journal of Intelligent Transportation Systems: Technology,

- Planning, and Operations, Taylor & Francis (Impact Factor = 1.250), 2013–2014.
- 9. *Editorial Board*, Transportation Research Part B: Methodological (Impact Factor = 3.894), Elsevier, 2014–present.
- 10. *Editorial Board*, Transportation Research Part C: Emerging Technologies (Impact Factor = 2.820), Elsevier, 2014–present.
- 11. Editorial Board, Mathematical Problems in Engineering, Hindawi, 2014.
- 12. Editorial Board, Journal of Applied Mathematics, Hindawi, 2014–present.
- 13. Editorial Board, Review-analytical and Scientific-technical Journal, LLC "Nauchno-issledovatel'skii institut konstruktsii avtomobilei" (NIIKA), 2014–present.

E. Proposal Referees/Reviewers

- 1. *Project proposal*, Neptune Orient Lines (NOL) Fellowship Programme, Singapore, 2008.
- 2. *Project proposal*, Engineering and Physical Sciences Research Council (EPSRC), 2014.
- 3. *Project proposal*, National Natural Science Foundation of China (NSFC), 2014-present
- 4. *Open Access e-Book proposal* entitled 'Advances in Time Series Forecasting' by C.H. Aladag, Bentham Science Publishers, 2009.
- 5. *Textbook proposal* entitled 'The Economics of Transport' by J. Cowie and S. Ison, Routledge, Taylor & Francis, 2006.
- 6. *Textbook proposal* entitled 'Introduction to Transportation Engineering Ideas and Concepts' by U. Weidmann et al., Spon Press (an imprint of Taylor & Francis), 2011.
- 7. *Textbook proposal* entitled 'Current Trends in Intelligent Transport Systems: Technologies and Applications' by A. Perallos et al., John Wiley & Sons, 2013.

F. Journal Paper Reviewers

- 1. Applied Mathematical Modelling
- 2. Applied Mathematics and Computation
- 3. Journal of Transportation Engineering
- 4. Built Environment Project and Asset Management
- 5. Central European Journal of Engineering
- 6. Central European Journal of Operations Research
- 7. Computer-Aided Civil and Infrastructure Engineering
- 8. Computers & Operations Research
- 9. Discrete Dynamics in Nature and Society
- 10. EURO Journal on Transportation and Logistics
- 11. European Journal of Operational Research
- 12. Expert Systems with Applications
- 13. HKIE Transactions
- 14. IEEE Transactions on Intelligent Transportation Systems
- 15. IET Journal
- 16. IIE Transactions
- 17. Insects
- 18. Integrated Computer-Aided Engineering
- 19. International Journal of ITS Research

- 20. International Journal of Sustainable Transportation
- 21. International Journal of Traffic and Transportation Engineering
- 22. International Journal of Transportation
- 23. Journal of Advanced Transportation
- 24. Journal of Civil Engineering and Management
- 25. Journal of Eastern Asia Society of Transportation Studies
- 26. Journal of Financial Management of Property and Construction
- 27. Journal of Global Optimization
- 28. Journal of Intelligent Transportation Systems: Technology, Planning, and Operations
- 29. Journal of King Saud University (Science)
- 30. Journal of Traffic and Transportation Engineering
- 31. Journal of Transport Geography
- 32. Journal of Transportation Systems Engineering and Information Technology
- 33. Journal of Urban Planning and Development
- 34. Knowledge-Based Systems
- 35. Mathematical and Computer Modeling
- 36. Mathematical Problems in Engineering
- 37. Network and Spatial Economics
- 38. Neurocomputing
- 39. OR spectrum
- 40. Proceedings of the Institution of Civil Engineers: Transport
- 41. Public transport
- 42. Soft Computing
- 43. The Scientific World Journal
- 44. Transactions on Modeling and Computer Simulation
- 45. Transport
- 46. Transport Policy
- 47. Transportation
- 48. Transportation Letters: the International Journal of Transportation Research
- 49. Transportation Research Part A: Policy and Practice
- 50. Transportation Research Part B: Methodological
- 51. Transportation Research Part C: Emerging Technologies
- 52. Transportation Research Part D: Transport and Environment
- 53. Transportation Research Part E: Logistics and Transportation Review
- 54. Transportation Research Record: Journal of the Transportation Research Board
- 55. Transportation Science
- 56. Transportmetrica
- 57. Transportmetrica A: Transport Science
- 58. Transportmetrica B: Transport Dynamic
- 59. Travel Behaviour and Society

Research Interest

- Sustainable and smart transportation, which involves developing novel theories, modeling frameworks, and solution methods for practical transportation network or intelligent transport system applications
 - Bicycle research
 - Dynamic traffic assignment
 - Environmentally sustainable network design
 - Public transport and taxi

• Transport network reliability

Invited Lectures and Presentations

A. Invited Lecture and Plenary Presentation

1. Dynamic traffic assignment: Properties and extensions. Invited Plenary Session, The 10th Conference of Hong Kong Society for Transportation Studies, Hong Kong, 10 Dec 2005.

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2. Lecture on "Hazardous material transport", The GCOE, Kyoto University (KU) – Centre for Maritime Studies (CMS), NUS, Workshop on Human Security Engineering for Asian Megacities. Kyoto University, Japan, 7–9 Sep 2009.

B. Invited Presentations and Speech

- 1. On the solution existence of dynamic traffic assignment with physical queues. Workshop on Dynamic Traffic Assignment, Queen's University, Belfast, UK, 15–16 Sep 2004.
- 2. Dynamic traffic assignment: Properties and extensions. The Hong Kong University of Science and Technology, Hong Kong, 18 Apr 2005.
- 3. Properties and extensions of dynamic traffic assignment. UK Dynamic Traffic Assignment Workshop. University College London, UK, 28 Mar 2006.
- 4. Time-dependent transport network design. The National University of Singapore, Singapore, 18 Dec 2006.
- 5. Generalisation of the risk-averse traffic assignment. The 17th International Symposium on Transportation and Traffic Theory, London, UK, 23–25 Jul 2007.
- 6. Paradoxes in transportation networks. Beijing Jiaotong University, 27 Oct 2008.
- 7. Modeling routing and scheduling hazardous materials in general road networks: Game theory approach. Beijing Jiaotong University, Beijing, China, 27 Oct 2008.
- 8. Modeling and solving the game theoretical formulation for the routing and scheduling hazardous material problem. Beijing University of Aeronautics and Astronautics, Beijing, China, 28 Oct 2008.
- 9. Analysis of paradoxical phenomena in transportation networks. Beijing University of Aeronautics and Astronautics, Beijing, China, 28 Oct 2008.
- 10. Cooperative game approaches to measuring network reliability considering paradoxes. The 18th International Symposium on Transportation and Traffic Theory, Hong Kong, 16–18 Jul 2009.
- 11. Reliability-based stochastic transit assignment with capacity constraints, Purdue University, USA, 7 Jul 2010.
- 12. Opening speech Behavior in Networks Workshop. The University of Hong Kong, Hong Kong, Dec 2011.
- 13. Designing bus routes and frequencies for Tin Shui Wai, Hong Kong. Sun Yat Shan University, Guangzhou, China, 22 Jul 2011.
- 14. A hybrid artificial bee colony algorithm for transit network design. South China University of Technology, Guangzhou, China, 23 May 2012.
- 15. An intersection-movement-based stochastic dynamic user optimal route choice model for assessing network performance. Rensselaer Polytechnic Institute, Troy, USA, 8 Jun 2012.
- 16. Bus network design: A comparison between genetic algorithm and artificial bee colony algorithm approaches. MMM-XIII, Shanghai University, China, 7 Oct 2012.

- 17. An intersection-movement-based dynamic traffic assignment problem. EPFL, Switzerland, 15 Jul 2013.
- 18. An intersection-movement-based approach to modeling and solving dynamic traffic assignment problems with physical queues. Beijing Jiaotong University, Beijing, China, 8 May 2014.
- 19. Transit route and frequency design: Bi-level modeling and hybrid artificial bee colony algorithm approach, The 6th International Workshop on Computational Transportation. Science. Hefei University of Technology (HFUT), Hefei, China, 8 Jun 2014.
- 20. The environmental sustainable network design problem, Workshop on Port, Shipping, and Transportation Studies. Shanghai Maritime University, Shanghai, China, 11–12 Jun 2014.
- 21. Transit route and frequency design: Bi-level modeling and hybrid artificial bee colony algorithm approach, Workshop on Advanced Models for Public Transport Systems. The Hong Kong Polytechnic University, Hong Kong, 4 Oct 2014.
- 22. Reliability-based stochastic transit network design: Formulation and paradox, International Symposium on the Behavior of Travelers in Big Transport Networks 2015. Beijing University of Aeronautics and Astronautics, Beijing, China, 25 Jan 2015.
- 23. Bilevel transit network design with transfer penalty, VU University Amsterdam, 24 Jul 2014.
- 24. A two-stage approach to modeling vacant taxi movements. The 21st International Symposium on Transportation and Traffic Theory, Kobe, Japan 5–7 Aug 2015.
- 25. Reliability-Based Stochastic Transit Assignment, Shanghai Maritime University, Shanghai, China, 6 Nov 2015.

Funded Projects

A. Externally-funded Research Grants & Projects (Since Joining HKU)

- 1. Columbarium development: Public transport policy implications, Public Policy Research, Research Grants Council (RGC), project code: HKU7026-PPR-12, HK\$467,740 (included on-costs), Principal investigator, Oct 2012–Sep 2015.
- 2. A distribution-free approach for reliable transport network design, National Science Foundation of China (NSFC), project code: 71271183, HK\$653,120 (520,000 Yuan), Principal investigator, Jan 2013–Dec 2016.
- 3. Development of an intersection movement-based modeling approach for the multi-class dynamic traffic assignment problem with queue spillback, General Research Fund, RGC, project code: HKU 716312E, HK\$644,880, Principal investigator, Jan 2013–Dec 2015.
- 4. A software tool with a strategic approach for identifying critical transport infrastructures and building resilience of urban transport systems, Innovation and Technology Fund, Matching Grant for Joint Research, project code: UIM/239, HK\$560,319 (including the matching fund from Ove Arup), Principal investigator, Apr 2013–Sep 2015.
- 5. A software tool with a strategic approach for identifying critical transport infrastructures and building resilience of urban transport systems, Innovation and Technology Fund, Internship Programme, project code: InP/081/13, HK\$230,790, Principal investigator, Jun 2013–Sep 2014.

- 6. A software tool with a strategic approach for identifying critical transport infrastructures and building resilience of urban transport systems, Innovation and Technology Fund, Internship Programme, project code: InP/137/13, HK\$176,400, Principal investigator, Sep 2013–Aug 2014.
- 7. A cell-based multi-class dynamic traffic assignment model which considers taxi cruising, General Research Fund, RGC, project code: HKU 716913E, HK\$500,000, Principal investigator, Jan 2014–Dec 2016.
- 8. A software tool with a strategic approach for identifying critical transport infrastructures and building resilience of urban transport systems, Innovation and Technology Fund, Internship Programme, project code: InP/209/14, HK\$101,920, Principal investigator, Sep 2014–Mar 2015.
- 9. A simultaneous route and departure time choice problem formulation that encapsulates a probabilistic cell transmission model (PCTM), General Research Fund, RGC, project code: HKU 17207214E, HK\$875,000, Principal investigator, Dec 2014–Nov 2017.
- 10. A software tool with a strategic approach for identifying critical transport infrastructures and building resilience of urban transport systems, Innovation and Technology Fund, Internship Programme, project code: InP/034/15, HK\$ 101,951.61, Principal investigator, Mar 2015—Sep 2015.
- 11. Road management and road safety audit training 2015, The Hong Kong Police Force, HK\$401,600, Project Coordinator, 13–18 Mar 2015.
- 12. Public transport policy measures to improve the mobility of the elderly in Hong Kong, Public Policy Research Funding Scheme, Central Policy Unit, project code: 2014.A8.025.15B, HK\$ 526,700, Principal investigator, Sep 2015–Sep 2016.
- 13. A methodology to determine the dynamic system optimum and sustainable congestion and emission tolls based on a generalized multiclass link transmission model, General Research Fund, RGC, project code: HKU 17201915, HK\$ 695,788, Principal investigator, Dec 2015–Nov 2018.
- 14. Advanced traffic management course 2016, The Hong Kong Police Force, HK\$378,800, Project Coordinator, 22 Feb–4 Mar 2016.

B. Internally-funded Research Grants & Projects (Since Joining the HKU)

- Managing degradable multi-modal transport networks with multiple private public transport operators considering travel choice behaviour and information provision, Seed Funding Programme for Basic Research for New Staff, The University of Hong Kong, project code: 201001159008, HK\$ 240,000 (with matching grant from the Faculty of Engineering, HKU), Principal investigator, Apr 2010–Sep 2011.
- 2. Innovations in Pricing of Transportation Systems: Workshop and Conference; Road pricing strategies to resolve both emission and Braess' paradoxes and time-dependent tolling strategies, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 200907170170, HK\$16,500, Principal investigator, May 2010.
- 3. The 24th European Conference on Operational Research; Solving the bus network design problem for the suburban area in Hong Kong by a Hybrid Genetic Algorithm, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 200907170284, HK\$16,500,

- Principal investigator, Jul 2010.
- 4. Multi-objective, time-dependent, and multi-modal transit network design under cooperation and competition, Incentive Award for RGC GRF Fundable but not Funded Projects, project code: HKU 716810E, HK\$25,000, Principal investigator, Jul 2010–Aug 2011.
- 5. Sustainable transport planning considering land use transport interaction over time and activity based travel behaviour, project code: 200902172003, Hui Oi Chow Trust Fund General Award, The University of Hong Kong, 200902172003, HK\$ 100,000, Principal investigator, Aug 2010–Jul 2012.
- 6. Multi-objective, time-dependent, and multi-modal transit network design under cooperation and competition, Seed Funding Programme for Basic Research, project code: 201011159026, HK\$ 116,000 (with matching grant from the Faculty of Engineering, HKU), Principal investigator, Apr 2011–Mar 2013.
- 7. Distribution-free methodologies for reliability assessment and reliable design of transport networks under uncertainty, Incentive Award for RGC GRF Fundable but not Funded Projects, project code: HKU 717511E, HK\$21,000, Principal investigator, Jul 2011–Aug 2012.
- 8. The Transportation Research Board (TRB) 91st Annual Meeting; A hybrid artificial bee colony algorithm for transit network design, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 201107170075, HK\$16,500, Principal investigator, Jan 2012.
- 9. Shared bike: Network design and repositioning, Student Research Assistantship for Engineering Undergraduate Students. The University of Hong Kong, HK\$ 29,535, Principal investigator, Jul 2011–Aug 2012.
- 10. Sustainable infrastructure engineering and development, Departmental Strategic Development Fund, HKU, Co-investigator, HK\$909,000, Mar 2012–Feb 2015.
- 11. Customer-searching behavior of vacant taxi drivers, Seed Funding Programme for Basic Research, The University of Hong Kong (with matching grant from the Faculty of Engineering, HKU), project code: 201111159056, HK\$ 122,200, Principal investigator, Apr 2012–Apr 2014.
- 12. The Transportation Research Board (TRB) 92nd Annual Meeting; on the existence of the simultaneous occurrence of Braess and emission paradoxes, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 201107170735, HK\$16,500, Principal investigator, Jan 2013.
- 13. Dynamic traffic modeling, management and control approach to environmental sustainability, Sino-British Fellowship Trust Visitorship 2012, HK\$48,000, Dec 2012–Mar 2013.
- 14. A link-based dynamic system optimal assignment model that captures the effects of queue spillback, Seed Funding Programme for Basic Research, The University of Hong Kong, project code: 201211159009, HK\$101,000 (with matching grant from the Faculty of Engineering, HKU), Principal investigator, Apr 2013–Apr 2015.
- 15. ISTTT20—The 20th International Symposium on Transportation and Traffic Theory; A continuum modeling approach for network vulnerability analysis at regional scale, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 201107170000, HK\$16,500, Principal investigator, Jul 2013.

- 16. Development of a travel time data sharing platform, Seed Funding Programme for Applied Research, The University of Hong Kong, project code: 201209160014, HK\$100,000, Principal investigator, Apr 2013–Sep 2014.
- 17. A novel methodology for modeling and solving simultaneous route and departure time choice problems, Seed Funding Programme for Basic Research, The University of Hong Kong, project code: 201311159123, HK\$83,800, Principal investigator, May 2014–Apr 2016.
- 18. Electric taxi policy measures to reduce roadside emissions and improve environmental sustainability, Seed Funding Programme for Basic Research, The University of Hong Kong, project code: 201411159063, HK\$47,100, Principal investigator, May 2015–Apr 2017.
- 19. CORS INFORMS 2015 Joint International Meeting, A taxi customer-search model: the cell-based logit-opportunity approach, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 201407170388, HK\$16,500, Principal investigator, Jun 2015.
- 20. Conference on Advanced Systems in Public Transport (CASPT2015), an approach—based formulation for reliability-based stochastic transit assignment, URC/CRCG Conference Support for Teaching Staff, The University of Hong Kong, project code: 201407170393, HK\$16,500, Principal investigator, Jul 2015.

C. Other Funded Research Grants & Projects Awarded

- 1. Instrumented vehicle SMART car, Research Capacity Building Grant, Trinity College Dublin, €26,500, Co-investigator, Sep 2005–Sep 2006.
- 2. Methodologies for online adaptive traffic management and offline transport network planning considering environmental, spatial, and temporal dimensions together with uncertainties in demand and supply, Lecturer Development Fund, School of Engineering, Trinity College Dublin, €15,000, Principal investigator, May 2006 –Jun 2007.
- 3. Transport network reliability, design and modelling: Game theoretical approaches, Start-up Grant R-264-000-229-112, NUS, SGD180,000, Principal investigator, Oct 2007–Dec 2009.

Publications

- In the publication list, the author with:
 - <u>Underlined name is myself.</u>
 - o Italicized name is/was my research student, undergraduate student or post-doctorate fellow in the current or previous working universities.
 - Bolded and underlined name is myself being corresponding author.
- The order of authors is roughly according to the level of their contribution.
- The candidate's weighting of contribution to the paper, which is roughly estimated as follows: Single author (100%), Two authors (1st: 60%; 2nd: 40%), Three authors (1st: 40%; 2nd: 30%; 3rd: 30%), Four authors (1st: 30%; 2nd: 30%; 3rd: 20%; 4th: 20%), Five authors, (1st: 25%; 2nd: 20%; 3rd: 20%, 4th: 20%; 5th: 15%) etc.
- The following superscripts are used.
 - SCI: 2013 science citation index impact factor from ISI Journal Citation Reports 2014.
 - SSCI: 2013 social science citation index impact factor from ISI Journal Citation Reports 2014.
 - ISI: number of citations from ISI Journal Citation Reports 2014.
 - Google: Citations from Google search engine on 21 February 2015.

A. Refereed Journal Papers

- 1. Lo, H.K. and <u>Szeto, W.Y.</u>, 2001. Advanced transportation information systems: A cost-effective alternative for network capacity expansion? *Journal of Intelligent Transportation Systems* (Impact Factor: 1.250^{SCI}), 6(4), 375–395 (Citations = 3^{ISI}, Contribution = 40%).
- 2. Lo, H.K. and <u>Szeto, W.Y.</u>, 2002. A cell-based dynamic traffic assignment model: Formulation and properties. *Mathematical and Computer Modelling* (Impact Factor: 2.020^{SCI}), 35(7–8), 849–865 (Citations = 16^{ISI}, Contribution = 40%).
- 3. Lo, H.K. and <u>Szeto, W.Y.</u>, 2002. A methodology for sustainable traveler information services. *Transportation Research Part B* (Impact Factor: 3.894 SCI), 36(2), 113–130 (Citations = 31 SI, Contribution = 40%).
- 4. Lo, H.K. and <u>Szeto, W.Y.</u>, 2002. A cell-based variational inequality formulation of the dynamic user optimal assignment problem. *Transportation Research Part B* (Impact Factor: 3.894^{SCI}), 36(5), 421–443 (Citations = 110^{ISI}, Contribution = 40%) (**This is the most cited paper**).
- 5. Lo, H.K. and <u>Szeto, W.Y.</u>, 2003. Time-dependent transport network design: A study of budget sensitivity. *Journal of the Eastern Asia Society for Transportation Studies* (Impact Factor: N.A.), 5, 1124–1139 (Citations = 14^{Google}, Contribution = 40%) (**This paper won the 2003 EASTS Outstanding Paper Award**).
- 6. Lo, H.K. and <u>Szeto, W.Y.</u>, 2004. Modeling advanced traveler information services: Static versus dynamic paradigms. *Transportation Research Part B* (Impact Factor: 3.894^{SCI}), 38(6), 495–515 (Citations = 25^{ISI}, Contribution = 40%).
- 7. <u>Szeto, W.Y.</u> and Lo, H.K., 2004. A cell-based simultaneous route and departure time choice model with elastic demand. *Transportation Research Part B* (Impact Factor: 3.894^{SCI}), 38(7), 593–612 (Citations = 49^{ISI}, Contribution = 60%).
- 8. <u>Szeto, W.Y.</u> and Lo, H.K., 2005. Strategies for road network design over time: Robustness under uncertainty. *Transportmetrica* (Impact Factor: 2.068 SCI), 1(1), 47–63 (Citations = 27 ISI, Contribution = 60%).
- 9. <u>Szeto, W.Y.</u> and Lo, H.K., 2005. The impact of advanced traveler information services on travel time and schedule delay costs. *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations* (Impact Factor: 1.250^{SCI}), 9(1), 47–55 (Citations = 26^{Google}, Contribution = 60%).
- 10. <u>Szeto, W.Y.</u> and Lo, H.K., 2005. Properties of dynamic traffic assignment with physical queues. *Journal of the Eastern Asia Society for Transportation Studies* (Impact Factor: N.A.), 6, 2108–2123 (Citations = 9^{Google}, Contribution = 60%).
- 11. <u>Szeto, W.Y.</u> and Lo, H.K., 2005. Dynamic traffic assignment: Review and future research directions. *Journal of Transportation Systems Engineering and Information Technology* (Impact Factor: N.A.), 5(5), 85–100 (Citations = 2^{Google}, Contribution = 60%).
- 12. Lo, H.K. and <u>Szeto, W.Y.</u>, 2005. Road pricing modeling for hypercongestion. *Transportation Research Part A* (Impact Factor: 2.525^{SCI}), 39(7-9), 705-722 (Citations = 16^{ISI} , Contribution = 40%).
- 13. <u>Szeto, W.Y.</u> and Lo, H.K., 2006. Transportation network improvement and tolling strategies: The issue of intergeneration equity. *Transportation*

- Research Part A (Impact Factor: 2.525^{SCI}), 40(3), 227-243 (Citations = 29^{ISI} , Contribution = 60%).
- 14. <u>Szeto, W.Y.</u> and Lo, H.K., 2006. Dynamic traffic assignment: Properties and extensions. *Transportmetrica* (Impact Factor: 2.068^{SCI}), 2(1), 31–52 (Citations = 47^{ISI}, Contribution = 60%) (**This paper won the HKSTS Outstanding Dissertation Paper Award and Gordon Newell Memorial Prize**).
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- 92. Ho, S.C. and <u>Szeto, W.Y.</u> 2016. GRASP with path relinking for the selective pickup and delivery problem. *Expert Systems With Applications*, 51, 14-25.

B. Reference Conference Papers/Extended Abstracts

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- 2. Lo, H.K. and <u>Szeto, W.Y.</u>, 2000. Properties of a cell-based dynamic traffic assignment model. *Proceedings of the 79th Annual Meeting of Transportation Research Board*, January 9–13, 2000, Washington, D.C., USA.
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- 56. Ho, S.C., and <u>Szeto, W.Y.</u>, 2015. GRASP with path relinking for the selective pickup and delivery problem. Paper presented at CORS/INFORMS International Meeting 2015, 14-17 Jun 2015, Montréal, QC.
- 57. <u>Szeto, W.Y.</u> and Jiang, Y., 2015. An approach—based formulation for reliability-based stochastic transit assignment. Paper presented at *Conference on Advanced Systems in Public Transport*, 19-23 July 2015, Rotterdam, The Netherlands.
- 58. <u>Szeto, W.Y.</u>., Yeung, J., Wong, R.C.P. and Yang, W.H. 2015. Trip attraction, trip distribution, and modal split for columbarium trips. *The 11th International Conference of Eastern Asia Society for Transportation Studies*, 11-14 September, Cebu, Philippines.
- 59. Shui, C.S., and <u>Szeto, W.Y.</u>, 2015. An artificial bee colony algorithm for public bike repositioning problem. Paper presented at 37th Australasian Transport Research Forum, Sydney, 29 September 1 October 2015.
- 60. Shui, C.S., and <u>Szeto, W.Y.</u>, 2015. Hybrid algorithm for bicycle network design. Paper presented at INFORMS 2015, Philadelphia, 1-4 November 2015.
- 61. Wong, R.C.P., <u>Szeto, W.Y.</u>, and Wong, S.C., 2015. Modeling vacant taxi movements: two-stage approach, Transportation Research Forum, Shanghai, 7-8 Nov, 2015.
- 62. Yang, W.H., Wong, R.C.P. and <u>Szeto, W.Y.</u> 2015. Modeling vacant taxi drivers' responses to passenger demand indication signals. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 63. Yang, L., <u>Szeto, W.Y.</u>, Wong, R.C.P. and Li, Y.C. 2015. Uncovering travel behavior of the elderly from Travel Characteristics Survey data in Hong Kong. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 64. Sun, S., <u>Szeto, W.Y.</u> and Wong, R.C.P. 2015. Transit network design for columbarium trips: insights of public transport policy measures. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 65. Wang, Y and <u>Szeto, W.Y.</u> 2015. Environmentally Sustainable Network Design Using Pareto Optimization. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 66. Jiang, Y. and <u>Szeto, W.Y.</u> 2015. Multi-Class Dynamic Traffic Assignment: Intersection-Movement-Based Formulation and Paradox. Paper presented at *The*

- 20th International Conference of Hong Kong Society for Transportation Studies, 12-14 December, Hong Kong.
- 67. Wang, B. and <u>Szeto, W.Y.</u> 2015. Reliability-Based User Equilibrium In Degradable Transport Networks With Speed Limits. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 68. Liu, Y., <u>Szeto, W.Y.</u>, Ho, S.C. and Wong, S.C. 2015. A Static Repositioning Problem with Multiple Vehicles in Bike-Sharing Systems. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 69. Cheng, Y.-R. and <u>Szeto, W.Y.</u> 2015. Artificial Bee Colony Approach To Solve The Electric Vehicle Routing Problem. Paper presented at *The 20th International Conference of Hong Kong Society for Transportation Studies*, 12-14 December, Hong Kong.
- 70. Wong, R.C.P., <u>Szeto, W.Y.</u>, Yang, L., and Li, Y.C. 2016. Identifying improvement areas of public transportation services for the elderly. Paper presented, *The Transportation Research Board 95th Annual Meeting*, 10-14 January, Washington D.C., United States.
- 71. Jiang, Y. and <u>Szeto, W.Y.</u>, 2016. Multi-Class Dynamic Traffic Assignment: Intersection-Movement-Based Formulation and Paradox. Paper presented, *The Transportation Research Board 95th Annual Meeting*, 10-14 January, Washington D.C., United States.
- 72. Cheng, Y.-R. and <u>Szeto, W.Y.</u> 2016. Artificial Bee Colony Approach to Solving the Electric Vehicle Routing Problem. Paper presented, *The Transportation Research Board 95th Annual Meeting*, 10-14 January, Washington D.C., United States.
- 73. Shui, C.S., and <u>Szeto, W.Y.</u>, 2016. An artificial bee colony algorithm for public bike repositioning problem. Poster and Paper presented at Transportation Research Board (TRB) 95th Annual Meeting, Washington D.C., 11-14 January 2016.
- 74. Shui, C.S., and <u>Szeto, W.Y.</u>, 2016. Bicycle network design using Genetic Algorithm. Poster presented at Transportation Research Board (TRB) 95th Annual Meeting, Washington D.C., 11-14 January 2016.
- 75. <u>Szeto, W.Y.</u>, and Shui, C.S., 2016. Exploring and predicting trends of bicycle sharing system in Vélib, Paris. Poster presented at Transportation Research Board (TRB) 95th Annual Meeting, Washington D.C., 11-14 January 2016.

TEACHING AND LEARNING

Teaching Interest

- Basic to advanced courses in *Transportation*.
- Core and applied courses in *Civil Engineering*, *Operations Research*, *System Analysis*, *Mathematics*, and *Finance*.

Primary Teaching Responsibilities

- CIVL1011/CIVL2111 Transportation Engineering (BEng, Core)
- CIVL2001 Engineering Design and Communications (BEng, Core)

- CIVL3010 Management and Communication Skills for Engineers (BEng, elective)
- CIVL3019/CIVL3119 Traffic Engineering (BEng, elective)
- CIVL4101 Capstone Design Project (BEng, Core)
- CIVL6054/GEOG7006 Engineering for Transport Systems (MA, elective; MSc elective)
- CIVL4101 Capstone Design Project (BEng, Core)
- CIVL7006 Optimization Techniques for Transportation Applications (MSc, elective)
- CIVL8012 Optimization Techniques for Engineering Applications (RPG, elective)
- GEOG7011 Research Methods in Transport Studies (MA, core) (The course is jointly offered by the Department of Civil Engineering and Department of Geography)
- GEOG7012 Transport Field Trip (MA, elective) (The course is jointly offered by the Department of Civil Engineering and Department of Geography)
- Engineering Climate Change (summer course offered by the Faculty of Engineering in 2011 for exchange students)
- Transportation Engineering: An Introduction (summer course offered by the Faculty of Engineering in 2011 for secondary school students)

Other Teaching Duties

A. External Examiners

- Academic Assessor, HKU School of Professional and Continuing Education, 2011–2017.
- External Examiner, Anna University, Chennai 600 025, India, 2014.
- External Examiner, St. Peter's College of Engineering and Technology, Chennai, India, 2014.

B. First Examiners

- CIVL1011/CIVL2111 Transportation Engineering (2010–now),
- CIVL3019 Traffic Engineering (2012–now),
- CIVL6054/GEOG7006 Engineering for Transport Systems (2010–now)
- CIVL8012 Optimization Techniques for Engineering Applications (2009– now),
- CIVL 7006 Optimization Techniques for Transportation Engineering (2015–now)

C. Second Examiners

- CIVL6035 Highway Pavement Engineering (2010–now),
- CIVL6047 Traffic Management and Control (2010–now),
- CIVL6070 Logistics and Transportation (2010–now),
- CIVL6084 Statistical Methods for Transportation (2015–now)

D. Chief Invigilators

• CIVL1011 Transportation Engineering (Dec 2010, Dec 2011, May 2013)

E. Interviewers

CIVL3010 Management and Communication Skills for Engineers (2010–2012, 2015)

F. Course Coordinators

 CIVL6054/GEOG7006 Engineering for Transport Systems (2010–now), CIVL1011 Transportation Engineering (2011–now), CIVL3019 Traffic Engineering (2012–2013), and CIVL 3020/3120 Transportation Infrastructure (2014–now)

G. Moderators

- CIVL2001 Engineering Design and Communication (ED&C) (2009–2014), (2011 summer)
- MSc students: 1 (2009–2010), 7 (2010–2011), 5 (2011–2012), 3 (2012–2013), 6 (2013–2014), 7 (2014–2015)
- Final Year Project (FYP) students: 4 (2009–2010), 6 (2010–2011), 8 (2011–2012), 5 (2012–2013), 12 (2013–2014), 6 (2014–2015)
- MPhil students: 1 (2009–2010), 3 (2010–2011), 2 (2013–2014), 2 (2014–2015)
- PhD students: 1 (2014–2015)
- MATPP students: 2 (2010–2011), 2 (2011–2012), 3 (2012–2013), 1 (2013–2014), 1 (2014–2015)

H. Internal Examiners

- PhD students: 1 (2011 summer), 1 (2014 summer)
- MPhil students: 1 (2010), 2 (2011 summer), 1 (2012 summer), 1 (2013 Fall)
- MATPP students: 2 (2010–2011), 2 (2011–2012), 3 (2012–2013), 1 (2013–2014)

Curriculum Development/Reform

A. Departmental Outcome-Based Teaching and Learning Coordinator

- Heavily engage in outcome-based curriculum design and development for both the undergraduate and postgraduate courses of the Department of Civil Engineering.
- Involve in designing outcome-based measurement such as the measurement report, measurement schedule, and employer survey.
- Monitor the quality of course measurement reports and summaries in the department.
- Give advice to the design of the outcome-based curriculums of transportation courses.
- Prepare documents for the accreditation of undergraduate and postgraduate programmes of the Department of Civil Engineering.
- Participate in workshops/short courses about outcome-based learning.

B. Course Instructors

- Develop a new course CIVL7006 Optimization Techniques for Transportation Applications for MSc students.
- Continuously improve the curriculums of CIVL3020/3120 Transportation Infrastructure Engineering, CIVL6054/GEOG7006 Engineering for Transport Systems, CIVL8012 Optimization Techniques for Engineering Applications, GEOG7011 Research Methods in Transport Studies, and GEOG7012 Transport Field Trip.
- Develop the outcome based curriculums of CIVL1011/CIVL2111

Transportation Engineering, CIVL3019/3119 Traffic Engineering, CIVL3020/3120 Transportation Infrastructure Engineering, CIVL6054/GEOG7006 Engineering for Transport Systems, CIVL7006 Optimization Techniques for Transportation Applications, and CIVL8012 Optimization Techniques for Engineering Applications.

• Develop two summer courses in 2011.

Teaching Innovations

- Motivate teaching assistants (TAs) of his courses or his research students to be the outstanding TAs.
- Discuss with them on how to be a good TA.
- Exchange tutorial skills with TAs.
 - Achievement: Three TAs, Shui, Chin Sum, Wang, Bei, and Wong, Cheuk Pong, obtained Outstanding TA Awards of the Department of Civil Engineering for the period 2013–2014, the period 2013–2014, and the period of 2011–2013, respectively.

Student Supervision and Achievement

A. Number of students supervised

- Post-doctorate and research fellows: 1 (2013–2014), 2 (2014–2015)
- Research assistants (RAs): 2 (2010–2013), 3 (2013–2014), 2 (2014–2015)
- Student RAs: 3 (2010–2011), 3 (2011–2012), 10 (2012–2014)
- FYP students: 10 (2010–2011), 2 (2011 summer), 4 (2011–2012), 1 (2012 summer), 4 (2012–2013), 2 (2013 summer), 2 (2013–2014), 6 (2014–2015)
- MATPP students: 2 (2010–2011), 2 (2011–2012), 3 (2012–2013), 1 (2013–2014)
- MSc students: 5 (2010–2011), 11 (2011–2013), 9 (2013–2014), 11 (2014–2015)

B. Postgraduate Supervision

No.	Name of Student	Curri- culum	Mode of Study	Finalized Thesis Title	Admission Year	Status of Study
1.	Cheng,	PhD	Full-		2015	Continuing
	Yiran		time			
2.	Yang,	PhD	Full-	An integrated taxi driver and	2014	Continuing
	Wenhan		time	customer search model		
2.	Yang,	MPhil	Full-	A generalized multiclass link	2014	Continuing
	Linchuan		time	transmission model		
3.	Yeung,	MPhil	Full-	Travel behaviour of cemetery	2014	Graduated
	Jonathan		time	and columbarium visitors:		in 2015
				Models and policy implications		
4.	Liu,	PhD	Full-	Chemical reaction optimization	2013	Continuing
	Ying		time	for bike repositioning problems		
5.	Shui,	PhD	Full-	A bi-level framework for	2012	Continuing
	Chin		time	bicycle network design		
	Sum					
6.	Sun,	PhD	Full-	Stochastic transit assignment	2012	Continuing
	Sujun		time			
7.	Wang,	PhD	Full-	Price of anarchy for reliability-	2011	Graduated
	Bei		time	based traffic assignment and		in 2015
_				network design		
8.	Wang,	PhD	Full-	Environmentally sustainable	2011	Graduated
	Yi		time	transportation network design	2010	in 2014
9.	Wong,	PhD	Full-	An iterative two-stage approach	2010	Graduated
	Cheuk		time	to modeling vacant taxi		in 2014
	Pong			movements: Formulations and		
10	T'	DI.D	E 11	implications	2000	C . 1 1
10.	Jiang,	PhD	Full-	Reliability-based transit	2009	Graduated
	Yu		time	assignment: Formulations,		in 2014
				Solution methods, and network		
				design applications		

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C. Achievements and Awards

- 1. Jiang, Yu, PhD (Graduated in 2014)
 - He won the first runner-up of the HKSTS Outstanding Student Paper Award (2013).
- 2. Wong, Cheuk Pong, Ryan, PhD (Graduated in 2014)
 - He won the first runner-up of the HKSTS Outstanding Student Paper Award (2014).
 - He was awarded the Sir Edward Youde Memorial Fellowship (2013).
 - He also won the Outstanding Teaching Assistant (TA) Award during the period of 2011–2013 (i.e., 2 consecutive years).
 - He was employed as a lecturer at the HKU in 2015
 - He won the The HKSTS Outstanding Dissertation Paper Award and Gordon Newell Memorial Prize (2015)
- 3. Wang, Bei, PhD
 - She was the Champion of the Outstanding TA Award during the period of 2013–2014.
 - Her paper entitled "Reliable transport network design" won The Chartered Institution of Highways and Transportation (CIHT) Best Student Paper Award, 2011.
 - She also won the Institution of Civil Engineers (ICE) Best Student

Paper Award 2011 (Highways, Railways, and Transportation discipline).

4. Wang, Yi, PhD

- She won the Champion of the HKSTS Outstanding Student Paper Award (2014).
- She won the first runner-up of the ICE Best Student Paper Award in 2011 (Structural and Materials discipline).

5. Sun, Sujun, PhD

• She won the CIHT Best Student Paper Award in 2012.

6. Shui, Chin Sum, PhD

- He won the Outstanding TA Award during the period of 2013–2015 (i.e., 2 consecutive years).
- He won the Champion of the HKSTS Outstanding Student Paper Award (2015).

7. Tsang Chun Man, BEng

- He won the CIHT Best Student Paper Award (2014).
- He won "Award of Merit" in Highways, Railways and Transportation discipline in the Papers Competition 2014, the Graduates & Students Division (G&S) of the Institution of Civil Engineers Hong Kong Association (ICE HKA)

SERVICE & KNOWLEDGE EXCHANGE

Service Responsibilities to HKU

A. Faculty/University Committee Appointment

- *Coordinator*, Master of Arts in Transport Policy & Planning (MATPP) dissertation, Jul 2011–now.
- *Member*, Board of the Faculty of Engineering, Dec 2009–Dec 2015.
- *Member*, Working Group on Outcome-based Approach to Student Learning, Jul 2012–now.
- *Member*, MATPP Admission Committee, Jul 2011–now.

B. Departmental Committee Appointment

- *Interviewer*, Joint University Programmes Admissions System (JUPAS) students, May 2010.
- *Member*, MSc (Eng) Admission, Jul 2010–Jun 2011.
- *Member*, Taught Postgraduate Committee, Jul 2010–Jun 2011.
- Member, MSc (Eng) Examination, Jul 2010–Jun 2012.
- *Member*, Student Staff Consultative Committee, Jul 2010–Jun 2012.
- *Member*, Capstone Design Project, Transportation, Jul 2011–Jun 2013.
- *Mentor*, Student Matters, Jul 2010–now.
- *Interviewer*, Sun Yat Shan University Student Interview, Jan 2011–Jan 2012.
- *Interviewer*, Chinese Student Interview for Faculty of Engineering, Jun 2011.
- Group Coordinator, Transportation and Construction, Jul 2011–Jun 2012, Jul 2013–Jun 2014.
- *Deputy Group Coordinator*, Transportation and Construction, Jul 2012–Jun 2013, Jun 2014–Jul 2015.
- Academic Advisor, Student Matters, Jul 2011–now.

Professional Society Membership/Service

A. Committee Members

- *Honorary Treasurer*, Hong Kong Society for Transportation Studies, Apr 2013–Mar 2015.
- *Honorary Deputy Secretary*, Hong Kong Society for Transportation Studies, Apr 2012–Mar 2013, Apr 2015 Mar 2016.
- *Council Member*, The Hong Kong Institution of Highways and Transportation, Dec 2013–present.
- Committee Member, The Eastern Section of the Chartered Institute of Logistics and Transport (CMILT), Ireland, Jul 2006–Jun 2007.
- *Young Member*, Committee on Transportation Network Modeling, ADB30, Transportation Research Board, Apr 2009–Apr 2012.
- *Member*, Transportation Engineering Technical Subcommittee, Institute of Engineers, Singapore, May 2008–Nov 2009.
- *Member*, Committee on Transportation Network Modeling, ADB30, Transportation Research Board, Apr 2012–Apr 2018.
- *Member*, Transport Policy Committee, Chartered Institute of Logistics and Transport in Hong Kong, 2014–2016.

B. Regular Members

- Associate Member, The Hong Kong Society for Transportation Studies (AMHKSTS), Sep 1998–Aug 2003.
- Graduate Member, The Institution of Civil Engineers, Sep 2002–Aug 2003.
- *Member*, The Eastern Asia Society for Transportation Studies, Jun 2006–present.

Public & Community Service

A. Chairmen

- *Chairman*, Organizing Committee, The 16th International Conference on the HKSTS, Hong Kong, 17–20 Dec 2011.
- *Chairman*, Organizing Committee, The International Symposium on Dynamic Traffic Assignment, Hong Kong, Dec 2018.

B. Committee Members

- *Member*, Program Committee, International Symposium on Maritime Logistics and Supply Chain Management, Singapore, Apr 23–24, 2009.
- Member, Regional Organizing Committee, The 11th International Conference on Advanced Systems for Public Transport, Hong Kong, Jul 20– 22, 2009.
- Member, International Scientific Committee, The 8th Eastern Asia Society of Transportation Studies (EASTS) Conference 2009, Surabaya, Indonesia, Oct 19–22, 2009.
- *Member*, Organizing Committee, The 15th HKSTS International Conference, Hong Kong, Dec 11–14, 2010.
- Member, International Scientific Committee, The 9th Eastern Asia Society of Transportation Studies (EASTS) Conference 2011, Jeju, Korea, Jun 19–23, 2011.
- *Member*, Technical Program Committee, The 2011 International Workshop on Intelligent Transportation Systems and Applications, Crete, Greece, Jun 28–30, 2011.
- Member, Program Committee, The 2011 FTRA International Workshop on

- Vehicular Communication Technology (FTRA WCC-VCT 2011), Jeju, Korea, Dec 12–15, 2011.
- *Member*, Technical Committee, The 9th Asia Pacific Transportation Development Conference and the 25th ICTPA Annual Conference, Chongqing, China, Jun 29 –Jul 2, 2012.
- *Member*, Technical Program Committee, 2012 FTRA International Conference on Advanced IT, Engineering and Management, Jeju, Korea, Jul 10–12, 2012.
- *Member*, Regional Organizing Committee, The 5th International Symposium on Transportation Network Reliability, Hong Kong, Dec 18–19, 2012.
- *Member*, Organizing Committee, The 17th HKSTS International Conference, Hong Kong, Dec 15–17, 2012.
- *Member*, Program Committee, The 2013 FTRA International Conference on Advanced IT, Engineering and Management (FTRA AIM-13) in Seoul, Korea, Feb 21–23, 2013.
- *Member*, Program Committee, The 2013 World Conference on Information Systems and Technologies (WorldCIST'13), Algarve, Portugal, Mar 27–30, 2013.
- *Member*, International Scientific Committee, The 10th Eastern Asia Society of Transportation Studies (EASTS) Conference 2013, Taiwan, Sep 9–12, 2013.
- *Member*, Organizing Committee, The 18th HKSTS International Conference, Hong Kong, Dec 14–16, 2013.
- *Member*, Program Committee, The FTRA 2013 International Symposium on Ubiquitous Computing and Embedded Systems (UCES-13), Danang, Vietnam, Dec 18–21, 2013.
- *Member*, Program Committee, The 2014 FTRA International Symposium on Advances in Bio-inspired Computing, Daejeon (Bio-Health Com 2014), Korea, Apr 9–12, 2014.
- *Member*, Program Committee, The 2014 International Workshop on Advanced Multimedia Computing (AMC-14), Busan, Korea, Apr 23–25, 2014.
- *Member*, Program Committee, The 5th FTRA International Conference on Creative Converged IT (CCIT 2014), Zhangjiajie, China, May 28–31, 2014.
- *Member*, International Program Committee, The 2014 International IEEE Conference on Intelligent Transportation Systems (IEEE ITSC 2014), Qingdao, China, Oct 8–11, 2014.
- *Member*, Organizing Committee, The 19th HKSTS International Conference, Hong Kong, Dec 13–15, 2014.
- *Member*, Program Committee, The 2015 International Advanced Multimedia Computing (AMC 2015), Jeju, Korea, Feb 24–26, 2015.
- *Member*, Program Committee, The 2015 International Advanced Intelligent Mobile Computing (AIM 2015), Jeju, Korea, Feb 24–26, 2015.
- *Member*, Program Committee, The 3rd World Conference on Information Systems and Technologies (WorldCIST'15), Ponta Delgada, São Miguel, Azores Islands, Portugal, Apr 1–3, 2015.
- *Member*, Program Committee, ICONS 2015, The 10th International Conference on Systems, Barcelona, Spain, Apr 19–23, 2015.
- *Member*, EASTS Awards/ATS Subcommittee, The 11th Eastern Asia Society of Transportation Studies (EASTS) Conference 2015, Cebu,

- Philippines, Sep 11–14, 2015.
- *Member*, Program Committee, Intelligent Information Systems Thematic Track, The 17th Portuguese Conference on Artificial Intelligence, Coimbra, Portugal, Sep 8–11, 2015.
- *Member*, Organizing Committee, The 20th HKSTS International Conference, Hong Kong, Dec 12–14, 2015.
- *Member*, Program Committee, ICONS 2016, The 10th International Conference on Systems, Lisbon, Portugal, Feb 21–25, 2016.
- *Member*, Technical Program Committee, EDEP 2016, International Conference on Energy Development and Environmental Protection, Beijing, China, Jun 11–12, 2016.
- *Member*, Scientific Review Committee, TRISTAN IX, the ninth Triennial Symposium on Transportation Analysis, Aruba, Jun 13–17, 2016.

C. Moderators/MC

- *MC*, The 5th Asia Pacific on Transport and the Environment, Singapore, Dec 7–8, 2007.
- *Moderator*, Business Environment Council Enviro Series Conference, Hong Kong, Nov 14, 2012.
- *Moderator*, Hong Kong Institution of Highways and Transportation (HKIHT) Cross-strait Highway and Transportation Development Conference, Hong Kong, Nov 3–5, 2014.

D. Section Chairs

- Section Chair, Business impact section, The 38th Annual Universities Transport Study Group (UTSG) Conference, Dublin, Jan 4–7, 2006.
- *Section Chair*, The 6th Intentional Conference on Traffic & Transportation Studies, Nanning, China, Aug 5, 2008.
- *Section Chair*, The Second International Symposium on Dynamic Traffic Assignment, Belgium, Aug 18–20, 2008.
- *Section Chair*, International Symposium on Maritime Logistics and Supply Chain Systems 2009, Singapore, Apr 23–24, 2009.
- *Section Chair*, The 11th International Conference on Advanced Systems for Public Transport, Hong Kong, Jul 20–22, 2009.
- *Section Chair*, The 8th EASTS Conference, Surabaya, Indonesia, Nov 16–19, 2009.
- *Section Chair*, Innovations in Pricing of Transportation Systems Conference & Workshop, Florida, USA, May 12–14, 2010.
- *Section Chair*, The 4th Nordic Optimization Symposium, Aarhus, Denmark, Sep 30–Oct 2, 2010.
- *Section Chair*, The 15th HKSTS International Conference, Hong Kong, Hong Kong, Dec 11–14, 2011.
- Section Chair, The 4th International Symposium on Dynamic Traffic Assignment, Martha's Vineyard, Massachusetts, USA, Jun 4–6, 2012.
- *Section Chair*, The 16th HKSTS International Conference, Hong Kong, Dec 17–20, 2012.
- Section Chair, The 10th EASTS Conference, Taiwan, Sep 9–12, 2013.
- Section Chair, INFORMS Annual Meeting 2014, San Francisco, USA, Nov 9–12, 2014.
- Section Chair, The 18th HKSTS International Conference, Hong Kong, Dec

- 13–15, 2014.
- Section Chair, CORS INFORMS 2015 Joint International Meeting, Montréal, QC, Jun 14–17, 2015.

E. Judges

- *Judge*, Graduates & Students Division of the Institution of Civil Engineers, Ireland Association Paper Competition, Jan 30, 2006.
- Judge, Singapore Science and Engineering Fair (SSEF) 2008, Mar 6, 2008.

Knowledge Exchange and Other Activities

A. Significant Knowledge Exchange Activities

- 1. Transfer knowledge of survey data collection, *Attend the Travel Characteristics Survey (TCS) 2011 Workshop*, *Member*, Transport Department, May 2011.
- 2. Transfer research results to society, *Organize the 16th International Conference of Society for Transportation Studies (HKSTS)* by the Department of Civil Engineering, Institute of Transport Studies, HKU, and HKSTS, Dec 2012.
- 3. Transfer research results to society, *Organize Behavior in Networks Workshop* by the Department of Civil Engineering, HKU and The University of Seoul, Dec 2012.
- 4. Transfer knowledge of traffic management and safety, *Organize Road Management and Road Safety Audit Training 2015 to Hong Kong Police Force*, 12-18 Mar 2015.

B. Additional Information on Services/Knowledge Exchange Activities

- 1. *Designer*, Design of the cover of the newsletter of the Department of Civil Engineering, Sept 2011–Feb 2012.
- 2. *Presenter*, Introduce the Department of Civil Engineering and its programme to the Nanyang Technology University students and compare the department with theirs, Jul 2011.
- 3. *Helper*, information day, HKU. Explain the department and programme to the public who visited the counter, 2010, 2011, 2012, 2013.
- 4. *Presenter*, Actively disseminate research results in conferences involving engineers and policy makers.
- 5. *Presenter*, Introduce transportation systems in HK to the government officials and engineers from China, 20 Oct 2011.
- 6. *Presenter*, Introduce the Department of Civil Engineering and programme to the Dalian Maritime University students, 24 Jan 2013.

C. Other Staff Activities

- 1. Academic advising training, Staff Development Activities, Jun 2011.
- 2. Meeting with Sun Yat Shan University faculty members, 28 Jun 2011.
- 3. Site visit of MTR Western Island Line, 17 June 2011.
- 4. Site visit of MTR Express Rail Line, 7 Jul 2011.