

# *Ni Sheng*



Position : Professor/Vice Dean  
Faculty : School of Business  
Email Address : nis@must.edu.mo  
Telephone : (853) 8897-2870

***Teaching and Research Areas:*** Statistics, Decision Modeling, Operations Management, Environmental Modeling for Environmental Management and Urban Planning

## ***Academic Qualification***

2006 - 2007 Postdoctoral Scholar / University of California, Berkeley  
2002 - 2005 PhD / The University of Hong Kong  
1998 - 2000 MEng / Nanyang Technological University, Singapore  
1991 - 1995 BSc / Civil Engineering / Zhejiang University

## ***Working Experience***

2017 - Present Professor / School of Business / Macau University of Science and Technology  
2018 - Present Vice Dean / School of Business / Macau University of Science and Technology  
2013 - 2018 Assistant Dean / School of Business / Macau University of Science and Technology  
2012 - 2017 Associate Professor / School of Business / Macau University of Science and Technology  
2007 - 2012 Assistant Professor / Macau University of Science and Technology  
2005 - 2006 Research Associate / The University of Hong Kong  
2000 - 2002 Research Engineer / Data Storage Institute, National University of Singapore

## ***Recent Awards***

2016 Macao Science and Technology Progress Award 3rd Prize by Macao SAR  
2014 BOC Excellent Research Award by Macau University of Science and Technology

### ***Representative Publications***

1. **Sheng N**, Tang UW, Grydehoj A. Urban morphology and urban fragmentation in Macau, China: island city development in the Pearl River Delta megacity region. *Island Studies Journal*, 2017, 12: 199-212. [SSCI]
2. **Sheng N**, Zhou X, Zhou Y. Environmental impact of electric motorcycles: Evidence from traffic noise assessment by a building-based data mining technique. *Science of the Total Environment*, 2016, 554: 73-82. [SCI]
3. **Sheng N**, Tang UW. The first official city ranking by air quality in China - A review and analysis. *Cities*, 2016, 51: 139-149. [SSCI]
4. Dai BL, **Sheng N\***, He YL, Xu JM, Zhu AF. An inland waterway traffic noise prediction model for environmental assessment in China. *International Journal of Environmental Science and Technology*, 2016, 13: 1235-1244. [SCI]
5. Choy KL, **Sheng N\***, Lam HY, Lai IKW, Chow KH, Ho GTS. Assess the effects of different operations policies on warehousing reliability. *International Journal of Production Research*, 2014, 52: 662-678. [SCI]
6. **Sheng N**, Tang UW. Zhuhai. *Cities*, 2013, 32: 70-79. [SSCI]
7. **Sheng N**, Tang UW. Risk assessment of traffic-related air pollution in a world heritage city. *International Journal of Environmental Science and Technology*, 2013, 10: 11-18. [SCI]
8. **Sheng N**, Tang UW. A building-based data capture and data mining technique for air quality assessment. *Frontiers of Environmental Science & Engineering*, 2011, 5: 543-551. [SCI]
9. **Sheng N**, Tang UW. Spatial analysis of urban form and pedestrian exposure to traffic noise. *International Journal of Environmental Research and Public Health*, 2011, 8: 1977-1990. [SCI]
10. **Sheng N**, Li SF. A multi-scale non-equilibrium molecular dynamics algorithm and its applications. *International Journal of Applied Mechanics*, 2009, 1: 405-420. [SCI]
11. Tang UW, **Sheng N**. Macao. *Cities*, 2009, 24: 220-231. [SSCI]
12. Li SF, **Sheng N**. On multiscale non-equilibrium molecular dynamics simulations. *International Journal for Numerical Methods in Engineering*, 2010, 83(8-9): 998-1038. [SCI]
13. Wu D, Lo SH, **Sheng N**, Sze KY. Universal three-dimensional connection hexahedral elements based on hybrid-stress theory for solid structures. *International Journal for Numerical Methods in Engineering*, 2010, 81(3): 307-334. [SCI]

14. **Sheng N**, Li SF. A non-equilibrium multiscale simulation of shock wave propagation. *Mechanics Research Communications*, 2008, 35: 10-16. [SCI]
15. Li SF, **Sheng N**, Liu XH. A non-equilibrium multiscale simulation paradigm. *Chemical Physics Letters*, 2008, 451: 293-300. [SCI]
16. Liu XH, Li SF, **Sheng N**. A cohesive finite element for quasi-continua. *Computational Mechanics*, 2007, 42: 543-553. [SCI]
17. **Sheng N**, Sze KY, Cheung YK. Trefftz solutions for piezoelectricity by Lekhnitskii's formalism and boundary-collocation method. *International Journal for Numerical Methods in Engineering*, 2006, 65: 2113-2138. [SCI]
18. **Sheng N**, Sze KY. Multi-region Trefftz boundary element method for fracture analysis in plane piezoelectricity. *Computational Mechanics*, 2006, 37: 381-393. [SCI]
19. Sze KY, **Sheng N**. Polygonal finite element method for nonlinear constitutive modeling of polycrystalline ferroelectrics. *Finite Elements in Analysis & Design*, 2005, 42: 107-129. [SCI]
20. Jin WG, **Sheng N**, Sze KY, Li J. Trefftz indirect methods for plane piezoelectricity. *International Journal for Numerical Methods in Engineering*, 2005, 63: 139-158. [SCI]
21. Sze KY, Chen JS, **Sheng N**, Liu XH. Stabilized conforming nodal integration: exactness and variational justification. *Finite Elements in Analysis & Design*, 2004, 41: 147-171. [SCI]
22. Fan SC, **Sheng N**. Meshless formulation using NURBS basis functions for eigenfrequency changes of beam having multiple open-cracks. *Journal of Sound and Vibration*, 2004, 269: 781-793. [SCI]
23. Hua W, **Sheng N**, Liu B. ABS designs for load/unload and shock resistance. *IEICE Transactions on Electronics*, 2002, E85-C, No. 10: 1789-1794. [SCI]
24. **Sheng N**, Yam CH, lu VP. Analytical investigation and the design of the compressive strength of steel gusset plate connections. *Journal of Constructional Steel Research*, 2002, 58: 1473-1493. [SCI]

### **Research Projects**

- |             |  |
|-------------|--|
| 2013 - 2015 | High-Resolution Traffic Noise Mapping in the Macao Peninsula (Funded by Macau Science and Technology Development Fund, Principal Investigator) |
| 2014 - 2015 | Road Traffic Noise Prediction Model for Macao (Funded by Faculty Research Grant, Principal Investigator)                                       |
| 2012 - 2013 | Impacts of Environmental Elements on Residential Property Values in  |

Macao (Funded by Macau Foundation, Principal Investigator)

- 2012 - 2013 Survey for Residential Status in the Neighborhood of Kou Lou (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2010 - 2011 Survey for Residential Status in the Neighborhood of Barra (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2010 - 2011 Public Environmental Awareness Survey in Macao (Project commissioned by the Environmental Protection Bureau, Macao SAR)
- 2009 - 2010 Survey for Residential Status in the Neighborhood of Ha Wan (Project commissioned by the Land, Public Works and Transport Bureau, Macao SAR)
- 2009 - 2010 Environmental Economic Assessment of Macao Light Rail Transit System (Project commissioned by the Transportation Infrastructure Office, Macao SAR)