Bo Mao

Associate Professor, Jiangsu Provincial Key Lab or eBusiness
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Ph.D. in Geoinformatics,
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Education

9/2008—4/2012   Ph.D. student, Geoinformatics, Royal Institute of Technology (KTH), Sweden
9/2005—6/2008   M.S., Computer Application, Southeast University, China
9/2001—7/2005   B.S., Computer Science and Technology, Xi'an Jiaotong University, China

Publications

1. **Bo Mao**, Yifang Ban, Generalization of 3D building texture using image compression and multiple representation data structure, *ISPRS Journal of Photogrammetry and Remote Sensing*, 79 (2013) pp. 68–79, (SCI, IF 3.435)
2. **Bo Mao**, Yifang Ban, Lars Harrie, 2010. A Multiple Representation Data Structure for Dynamic Visualisation of Generalised 3D City Models, *ISPRS Journal of Photogrammetry and Remote Sensing,* Vol. 66, issue 2, pp. 198-208. (SCI, IF 3.435)
3. **Bo Mao**, Lars Harrie, Yifang Ban, 2011. Detection and Typification of Linear Structures for Dynamic Visualisation of 3D City Models, *Computers, Environment and Urban Systems*, Volume 36, Issue 3, May 2012, Pages 233–244. (SCI, IF 1.932)
4. **Bo Mao**, Yifang Ban, 2011. Visualization of 3D City Model through the Internet using CityGML and X3DOM, *Cartographica*, Vol. 46, No. 2, pp. 109-114.
5. **Bo Mao**, Zhiang Wu, Jie Cao, A Framework of Online Spatial-temporal Data Visualization based on HTML5, International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XXXIX-B2, 2012 XXII ISPRS Congress, 25 August – 01 September 2012, Melbourne, Australia
6. **Bo Mao**, Jie Cao, Zhiang Wu & Wei Yao. HTML5 based Visualization of high density LiDAR data and color information for agriculture applications, SilviLaser 2012, September 16-18, 2012, Vancouver, Canada
7. **Bo Mao**, Yifang Ban, A multiple representation data structure of 3D building textures, 2011 19th International Conference on Geoinformatics, Shanghai, 24-26 June 2011, pp. 1-6
8. Hongchao Fan, **Bo Mao**, Jie Shen, Liqiu Meng, 2011. Shell model representation as a substitute of LoD3 for 3D modeling in CityGML, *Geo-spatial Information Science*, accepted for publishing.
9. Haoran Hu, Zhiang Wu, **Bo Mao**, Yi Zhuang, Jie Cao, Jingui Pan: Pick-Up Tree Based Route Recommendation from Taxi Trajectories. WAIM 2012: 471-483
10. Zhiang Wu, Jie Cao, **Bo Mao**, Youquan Wang: Semi-SAD: applying semi-supervised learning to shilling attack detection. RecSys 2011: 289-292
11. **Bo Mao**, Lars Harrie, Yifang Ban, 2010. A Dynamic Typification Method of 3D City Models using Minimum Spanning Tree, *Proc. 6th international conference on Geographic Information Science* (GIScience2010), Zurich, Switzerland, 14-17 September.
12. **Bo Mao**, Hongchao Fan, Lars Harrie, Yifang Ban, Liqiu Meng, 2010. City Model Generalisation Similarity Measurement using Nested Earth Mover's Distance, *Proc. 13th Workshop of the ICA commission on Generalisation and Multiple Representation*, Zurich,

Switzerland, 12-13 September.

13. **Bo Mao**, Yifang Ban, Lars Harrie, 2009. A Framework for Generalisation of 3D City Models based on CityGML and X3D, *Proc. ISPRS workshop on Quality, Scale and Analysis Aspects of Urban City models*, Lund, Sweden, 3-4 December (On CDROM)

14. **Bo Mao**, Yifang Ban, Lars Harrie, 2009. A Framework of Online 3D City Visualisation using CityGML and X3D, *Proc. 6th International Symposium on Digital Earth* (ISDE6), Beijing, China, 9-12 September (On CDROM).

15. Jiuxin Cao, **Bo Mao**, Junzhou Luo, 2010. A Segmentation Method for Web Page Analysis using Shrinking and Dividing. *International Journal of Parallel, Emergent and Distributed Systems*, 2010, 25: 2, pp. 93 - 104 (EI)

16. Jiuxin Cao, **Bo Mao**, Junzhou Luo, Bo Liu, 2009. Architecture and Algorithm of Phishing Web Pages Detection, *Chinese Journal of Computers*, 2009, Vol. 32(5) pp. 1088-1097 (in Chinese, EI)

17. Jiuxin Cao, **Bo Mao**, Junzhou Luo, 2008. The Self-adaptive Framework of Learning Object Based on Context, *International Conference On Computer Science And Software Engineering* (CSSE), Wuhan, China, Dec. 12-14, 2008, pp.941-944 (EI)

18. Jiuxin Cao, **Bo Mao**, Junzhou Luo, 2007. A Web Page Segmentation Algorithm Based on Iterated Dividing and Shrinking, *Network and Parallel Computing Workshops* (NPC2007). Dalian, China, Sep.17-21,2007: pp. 701-705 (EI)

19. Jiuxin Cao, **Bo Mao**, Junzhou Luo, 2007. Self-Adapting and Agent-Based Personalised Courseware Model, *IEEE The 21st International Conf. On Advanced Information and Application* (AINA2007). Niagara, Canada, MAY 21-23,2007: pp. 695-701 (EI)

20. **Bo Mao**, Jiuxin Cao, Junzhou Luo, 2007. Web Phishing Attack and Its Defence，*China Education Network,* pp. 48-50，May 2007 (in Chinese)

21. **Bo Mao**, Jiuxin Cao, Junzhou Luo, Liang Ge, Jie Cheng, 2006. MVC Based Courseware Generation Pattern and Its Implementation, *Proceedings of 8th Cross-Strait Information Technology Conference* (CSIT2006) 2006.10 pp. 79-82 (in Chinese)

Invention Patent

1/2010	Jiuxin Cao, Junzhou Luo, **Bo Mao**, The Method of Anti-Phishing Based on Image Processing, Patent No. ZL 200710130809.6
12/2012	Jie Cao, Zhiang Wu, **Bo Mao**, A Grid Server QoS Scheduling Method Based on Markov Chain, Patent No. ZL201110123200.2

Research Experience

2013-2015	Generalization of 3D building groups based on morphology analysis (41201486), NSF China, PI
On going	ViSuCity Project – A Visual Sustainable City Planning Tool 3D city model visualisation and generalisation
2008	Technology of Phishing Web Detection and Its Implementation (Graduation Thesis) Research the web page acquisition, visual match between web pages and SOA (Service Oriented Architecture) related technology National Technologies Research and Development Program during the 11th Five-Year Plan Period of China—The Integration and Shared of e-Learning Resources (No. 2006BAH02A24-4) Research the encapsulation and verification of e-Learning Resources
2007	National Scientific and Technological project—The Development and Demonstration

of Multimedia System Based on National Foundation Software and B/S Architecture (No. 2005BA115A01）
Develop the courseware making software in Linux system

2006   Wireless Information Platform for Police Application (sponsored by Police Department of Nanjing)
Develop the web station for police information

Computer Skills

Languages   Java, C, C++, Python, Assembly Language, HTML, XML, JSP, SQL
OS   Windows, Linux, Unix, MS DOS
Software   Eclipse, Matlab, Opnet, Oracle, Tomcat

Research Interest

3D city model visualisation, generalisation, web 3D