

CURRICULUM VITAE

JIANG LI

EDUCATION

Ph.D. (2003) Electrical Engineering with Ph.D. level minor (36 credits) in Computer Science
University of Nebraska-Lincoln (UNL)

DISSERTATION: INFORMATION MINING IN REMOTE SENSING IMAGERY

- ❖ Designed and implemented software tools for remote sensing image information mining
- ❖ Developed and implemented Piecewise Linear Polygonal Approximation algorithm for shape analysis
- ❖ Implemented Support Vector Machines for image classification and Gabor Wavelets for texture analysis
- ❖ Designed and implemented object-oriented databases and image databases

M.S. (1998) Electronics Engineering, Beijing Institute of Technology (BIT)

B.S. (1995) Electronics Engineering, Beijing Institute of Technology (BIT)

RESEARCH INTEREST

Image Information Mining, Distributed Computing, Software Engineering, Object-Oriented Databases

PROFESSIONAL EXPERIENCE

08/2007 – present	<i>Associate Professor</i> , Computer Science and Information Technology Austin Peay State University (APSU)
08/2003 – 08/2007	<i>Assistant Professor</i> , Computer Science and Information Technology, APSU
09/2002 – 12/2002	<i>Teaching Assistant</i> , Institute for International Teaching Assistants, UNL
01/2000 – 08/2003	<i>Research Assistant</i> , Department of Electrical Engineering, UNL
03/1998 – 12/1999	<i>Instructor</i> , Department of Computer Science, Beijing Broadcasting Institute
03/1998 – 12/1999	<i>Software Engineer</i> , Beijing Broadcasting Institute Information Technology CO.
02/1996 – 02/1998	<i>Software Developer</i> , Beijing Institute of Technology Industrial Group, INC.

COURSES TAUGHT

CSCI 4600 Software Design and Development	CSCI 4800 Information Systems Senior Seminar
CSCI 4550 Computer Graphics	CSCI 4450 Introduction to Artificial Intelligence
CSCI 4350 Compiler Design	CSCI 4050 Multimedia Tools and Techniques
CSCI 3770 Windows Network Operating System Administration	CSCI 3700 Data Communications and Networking
CSCI 3410 Computer Organization II	CSCI 3005 Object-Oriented Programming
CSCI 3300 Introduction to Web Development	CSCI 2010 Introduction to Programming II
CSCI 2080 Programming in Selected Languages (C#)	CSCI 1015 Introduction to Programming in Java
CSCI 2080 Programming in Selected Languages (Visual Basic)	CSCI 1010 Introduction to Programming in C++
CSCI 1005 Software, Hardware, and Programming Concepts	CSCI 1000 Introduction to Computer Science

PUBLICATIONS

1. J. Li, "Remote Sensing Image Information Mining with HPC Cluster and DryadLINQ," in *Proceedings of the 49th ACM Southeast Conference ACM SE'11*, Kennesaw, Georgia, March 24 – 26, 2011, pp. 227 – 232.
2. S. Jator and J. Li, "An algorithm for second order initial and boundary value problems with an automatic error estimate based on a third derivative method," *Numerical Algorithms*, DOI 10.1007/s11075-011-9492-3, August, 2011.
3. J. Li, "Distributed Remote Sensing Image Information Mining with DryadLINQ," *2010 ACM Mid-Southeast Conference*, Gatlinburg, TN, November 11 – 12, 2010, p. 96.
4. J. Li, "Network administration course redesign with MOAC Virtual Labs," *2009 ACM Mid-Southeast Conference*, Gatlinburg, TN, November 12 – 13, 2009, p. 56.
5. J. Zhou and J. Li, "An open platform for integrated broadcast monitoring," *Special Track with EMS: Information Systems and Management (ISM 2009)*, Beijing, Sep 20 – 22, 2009, DOI 10.1109/ICMSS.2009.5303275.
6. S. Jator and J. Li, "Solving two-point boundary value problems by a family of linear multistep methods," *Neural, Parallel, and Scientific Computations*, vol. 17, no. 2, pp. 135 – 146, June 2009.
7. J. Li, "Teaching unified process in software design and development courses – a case study," *The Journal of Computing Sciences in Colleges*, vol. 24, no. 5, pp. 5 – 11, May 2009.
8. S. Jator and J. Li, "A self-starting linear multistep method for a direct solution of the general second order initial value problem," *International Journal of Computer Mathematics*, vol. 86, no. 5, pp. 827 – 836, May 2009.
9. S. Jator and J. Li, "Boundary value methods via a multistep method with variable coefficients for second order initial and boundary value problems," *International Journal of Pure and Applied Mathematics*, vol. 50, no. 3, pp. 403 – 420, March 2009.
10. J. Li and N. Smithfield, "Building a computer networking lab with virtualization tools," *2007 ACM Mid-Southeast Conference*, Gatlinburg, TN, November 15 – 16, 2007, p. 70.
11. J. Li, "Hierarchical land cover information retrieval in object-oriented remote sensing image databases with native queries," in *Proceedings of the 45th ACM Southeast Conference ACM SE'07*, Winston-Salem, NC, March, 23 – 24, 2007, pp. 467 – 472.
12. J. Li and R. M. Narayanan, "Integrated information mining and image retrieval in remote sensing," *Recent Advances in Hyperspectral Signal and Image Processing*, Edited by C.-I Chang, Transworld Research Network, 2006.
13. J. Li, "Comparing CART with backpropagation neural networks in vegetation greenness classification," in *Proceedings of the 44th ACM Southeast Conference ACM SE'06*, Melbourne, Florida, USA, March 10 – 12, 2006, pp. 760 – 761.
14. J. Li and R. M. Narayanan, "Integrated spectral and spatial information mining in remote sensing imagery," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 42, no. 3, pp. 673 – 685, March 2004.
15. J. Li and R. M. Narayanan, "A shape-based approach to change detection of lakes using time series remote sensing images," *IEEE Transactions on Geoscience and Remote Sensing*, vol. 41, no. 11, pp. 2466 – 2477, November 2003.
16. J. Li, R. M. Narayanan, and P. Z. Revesz, "A shape-based approach to change detection and information mining in remote sensing," *Frontiers of Remote Sensing Information Processing*, Chi Hau Chen, Editor, World Scientific Publishing, July 2003.
17. J. Li and R. M. Narayanan, "Integrated spectral and spatial information mining in remote sensing images," *Nebraska Academy of Sciences 123rd Annual Meeting*, Lincoln, NE, April 2003, p. 21.
18. J. Li and R. M. Narayanan, "Shape-based change detection and information mining in remote sensing," in *Proceedings of 22nd IEEE International Geoscience and Remote Sensing Symposium on Data Mining in Remote Sensing*, Toronto, Canada, June 2002, vol. 2, pp. 1035 – 1037.

19. J. Li and R. M. Narayanan, "Shape-based change detection in remote sensing: application towards information mining," *Nebraska Academy of Sciences 122nd Annual Meeting*, Lincoln, NE, April 2002, pp. 19 – 20.
20. J. Li, R. M. Narayanan, W. J. Waltman, and A. J. Peters, "Fuzzy feature-based image mining in remote sensing," in *Proceedings of SPIE AeroSense Conference on Data Mining and Knowledge Discovery*, Orlando, Florida, April 2001, vol. 4384, pp. 46 – 55.
21. R. Lv, J. Li, Z.X. Yang, et al, "A multi-channel digital video broadcasting satellite receiving system," *Journal of Beijing Broadcasting Institute*, vol. 28, no. 3, pp. 42 – 47, May/June 1999.
22. J. Zhou, L.H. Dou, and J. Li, "Integrated control and management system in fuel depot," *Journal of Beijing Institute of Technology*, vol. 17, no. 67, pp. 340 – 343, June 1997.

GRANTS AND FUNDS

1. Faculty Research Fund (\$750), College of Graduate Studies, APSU, 2011.
2. Summer Research Fellows Program (\$5,000), APSU, 2010.
3. Faculty Research Fund (\$1,000), College of Graduate Studies, APSU, 2009.
4. Faculty Research Fund (\$1,200), College of Graduate Studies, APSU, 2007.

SERVICES

PROFESSIONAL SERVICES

08/2008 – 08/2010	<i>Faculty Sponsor</i> , ACM Student Chapter at APSU
11/2006	<i>Judge</i> , 2006 Conference of the Mid Southeast Chapter of the ACM
11/2005	<i>Session Chair, Judge</i> 2005 Conference of the Mid Southeast Chapter of the ACM
11/2004	<i>Judge</i> , 2004 Conference of the Mid Southeast Chapter of the ACM
11/2003	<i>Session Chair</i> , 2003 Conference of the Mid Southeast Chapter of the ACM
06/2002	<i>Session Co-Chair</i> , Data Mining in Remote Sensing, IGARSS02, Toronto, Canada

COMMITTEE MEMBERSHIP

08/2009 – present	Retention and Tenure Committee, College of Science and Math, APSU
08/2009 – present	Retention and Tenure Committee, Dept of Computer Science and Info Tech, APSU
08/2008 – present	Promotion Committee, Dept of Computer Science and Info Tech, APSU
10/2007 – present	New Faculty Search Committee, Dept of Computer Science and Info Tech, APSU
01/2005 – 05/2008	College of Science & Math Curriculum Committee, APSU
08/2005 – 08/2007	Technology Committee, APSU
08/2004 – 07/2005	Student Non-academic Grievance Committee, APSU

JOURNAL REVIEWER

2006 – present	Pattern Recognition Letters
2004 – present	IEEE Transactions on Geoscience and Remote Sensing
2004	International Journal of Information Technology and Management
2004	Remote Sensing of Urban and Sub-Urban Areas

AFFILIATIONS

09/2008 – present	<i>Member, Association for Computing Machinery (ACM)</i>
08/2007 – present	<i>Member, ODBMS.ORG's Panel of Experts</i>
01/2002 – 09/2008	<i>Member, Institute of Electrical and Electronics Engineers (IEEE)</i>
08/1998 – present	<i>Microsoft Certified System Engineer (MCSE), Microsoft</i>

HONORS AND AWARDS

1. 1st Place, J. Li, "Content-based image information mining in remote sensing," Graduate Student Research Paper Competition, Department of Electrical Engineering, UNL, October 17, 2002.
2. 2nd Prize, R. Lv, J. Li, and Z.X. Yang, "Multi-satellite single station digital multi-channel receiving system," Advanced Science and Technology Committee of Beijing, China, December 2001.
3. 2nd Prize, L.H. Dou, J. Li, and J. Zhou, "Auto-control and information management system for oil depot fueling," National Science and Technology Industrial Committee, China, November 1999.