

BIOGRAPHICAL SKETCH

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NAME Jianqiu (Michelle) Zhang, Ph.D.	POSITION TITLE Research Assistant Professor		
eRA COMMONS USER NAME JIANQIU.ZHANG			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Zhejiang University, Huangzhou, China	B.S.	1992	Electrical Engineering
Zhongshan University, Guangzhou, China	M.S.	1995	Electrical Engineering
State Univ. of New York, Stony Brook, NY	Ph.D.	2002	Electrical Engineering

A. Positions and Honors.**Positions and Employment**

1995 - 1997 Software Engineer, Research and Development, Guangdong Nortel
 2002 - 2007 Assistant Professor, Department of Electrical and Computer Engineering, University of New Hampshire
 2007 - Research Assistant Professor, Department of Electrical and Computer Engineering, University of Texas at San Antonio.

Services

- **Reviewer:** IEEE Transactions on Wireless Communications, EUROSIP Journal on Signal Processing, and other conferences.

Professional Membership

Member, Institute of Electrical and Electronics Engineers (IEEE)

Honors

2007 Signal Processing Magazine Best Paper Award for the paper by P. M. Djurić, J. M. Kotecha, **J. Zhang**, Y. Huang, T. Ghirmai, M. F. Bugallo and J. Míguez, "Particle filter," *IEEE Signal Processing Magazine*, 19-38, September, 2003.

B. Selected peer-reviewed publications (in chronological order).

(Publications selected from peer-reviewed publications)

1. **J. Zhang** and N. Phamdo, "Minimum Distance Calculation in Multiuser CDMA Systems with Identical Cross-Correlations," *Proceedings of Conference on Information Sciences and Systems*, pp. FA-2-FA-5, Princeton University, March, 2000.
2. **J. Zhang** and N. Phamdo, "Approximate Performance Analysis of Turbo Codes with Fixed Interleavers," *Proceedings of the IEEE International Symposium on Information Theory*, pp. 68, Sorrento, Italy, 2000.
3. **J.Zhang** and P.M. Djurić, "Joint Channel Estimation and Decoding of Space-Time Trellis Codes," *Proc. 11th IEEE Workshop on Statistical Signal Processing*, Singapore, Aug., 2001.
4. **J.Zhang** and P.M. Djurić, "Reduced Complexity Monte Carlo Smoothing with Application to Communications," *Proceedings of Conference on Information Sciences and Systems*, Princeton, NJ, 2002.
5. **J. Zhang** P. M. Djurić, "Joint Estimation and Decoding of Space-time Trellis Codes", *EURASIP Journal on Applied Signal Processing*, pp. 305-315, vol. 2002, No. 3, March 2002.

6. **J. Zhang**, Y. Huang and P. M. Djurić, "Multiuser detection with particle filtering," in *Proceedings of the European Signal Processing Conference*, Toulouse, France, Sept., 2002.
7. P. M. Djurić, J. M. Kotecha, **J. Zhang**, Y. Huang, T. Ghirmai, M. F. Bugallo and J. Míguez, "Particle filter," *IEEE Signal Processing Magazine*, 19-38, September, 2003.
8. **J. Zhang**, "Performance Analysis of Coded CDMA Systems", *IEEE Transactions on Information Theory*, vol. 49, pp. 3282-3288, Dec., 2003.
9. **J. Zhang**, "On the bounds of non-coherent capacity of Gauss-Markov fading channels," *Proceedings of International Conference on Speech and Signal Processing*, Philadelphia, March 2005.
10. Y. Huang, **J. Zhang**, and P. M. Djurić, "Bayesian Detection for BLAST," *IEEE Transactions on Signal Processing*, vol. 53, no. 3, pp. 1086-1096, March, 2005
11. Y. Huang, J. Wang, Y. Wang, and **J. Zhang** "Bayesian inference of cell cycle regulatory networks," *IEEE Workshop on Genomic Signal Processing and Statistics*, 2005.
12. **J. Zhang**, "Non-Asymptotic Capacity Lower Bounds for Non-coherent SISO Channels", *Proceedings of Conference on Information Sciences and Systems*, Princeton, US., March, 2006.
13. **J. Zhang**, "Capacity Study of Non-Coherent MIMO Channels," *Proceedings of International Symposium on Information Theory*, Seattle, US, July, 2006.
14. **J. Zhang**, "Non-asymptotic Capacity Lower Bound for Non-coherent SIMO Channels with Memory", *Proceedings of International Symposium on Information Theory*, Seattle, US, July, 2006.
15. Y. Huang, J. Wang, **J. Zhang**, M. Sanchez, and Y. Wang, "Bayesian Inference of Genetic Regulatory Networks from Time Series Microarray Data Using Dynamic Bayesian Networks," *Journal of Multimedia*, to appear
16. **J. Zhang**, H. Wang, A. Suffredini, D. Gonzales, E. Gonzalez, Y. Huang, and X. Zhou, "Bayesian Peak Detection for pro-TOF MS MALDI Data", *Proceedings of ICASSP*, 2008, Las Vegas
17. J. Meng, **J. Zhang**, Y. Huang, " Finding Time Varying Transcription Modules through Time Series Microarray Data," ICMLC, July 2008
18. "A Novel Feature Selection and Disease Classification Algorithm Using Probabilistic Information of Peptide Peaks in MALDI proTOF data", L. Zhang, **J. Zhang**, Y. Huang, X. Zhou, Poster presented at American Society of Mass Spectrometry Conference, Denver, June 1-5, 2008
19. 4. "Feature selection and classification of pro-TOF data based on soft information"
Lin Zhang; **J. Zhang**; Xiao-Bo Zhou; Hong-Hui Wang; Yu-Fei Huang; Hui Liu; Wong, S., Proceedings of International Conference on [Machine Learning and Cybernetics](#), Volume: 7 Date: 12-15 July 2008 , Page(s): 4018-4023.
20. "Statistical modeling of LC/MS peaks", **J. Zhang**, W. Haskins, Y. Huang, Poster presented at the 11th RCMI International Symposium on Health Disparities, December, 1-4, 2008, Honolulu, Hawaii.

C. Research Support