

Biographical Sketch of Ying Nian Wu

Education

- Harvard University, Statistics, A.M. November 1993
- Harvard University, Statistics, Ph.D. November 1996

Appointments

- 2006 - Present. Professor, Department of Statistics, UCLA.
- 2001 - 2006. Associate Professor, Department of Statistics, UCLA.
- 1999 - 2001. Assistant Professor, Department of Statistics, UCLA.
- 1997 - 1999. Assistant Professor, Department of Statistics, University of Michigan.
- Summers 1996, 1997. Visitor, Bell Labs, Lucent Technologies.

Awards

- Honorable Mention for David Marr Prize, International Conference on Computer Vision, 2007.
- Honorable Mention for David Marr Prize, International Conference on Computer Vision, 1999.
- Winner of Student Paper Competition, Statistical Computing Section, American Statistical Association, 1995.

Publications

Five publications most closely related to the proposed project:

1. Wu, Y. N., Si, Z., Gong, H., and Zhu, S. C. (2009) Learning active basis model for object detection and recognition. *International Journal of Computer Vision*, in print.
2. Si, Z., Gong, H., Zhu, S. C., and Wu, Y. N. (2009) Learning active basis models by EM-type algorithms. *Statistical Science*, in print.
3. Wu, Y. N., Guo, C., and Zhu, S. C. (2008) From information scaling to regimes of statistical models. *Quarterly of Applied Mathematics*, 66, 81-122.
4. Wu, Y. N., Si, Z., Fleming, C., and Zhu, S. C. (2007) Deformable template as active basis. *Proceedings of International Conference of Computer Vision*.
5. Wu, Y. N., Zhu, S. C., and Liu, X. (2000) Equivalence of Julesz ensembles and FRAME models. *International Journal of Computer Vision*, 38, 245-261.

Five other related publications:

1. Wu, Y. N., Li, J., Liu, Z., and Zhu, S. C. (2007) Statistical principles in image modeling. *Technometrics*, 49, 249-261.
2. Guo, C. E., Zhu, S. C., and Wu, Y. N. (2006) Primal sketch: integrating structure and texture. *Computer Vision and Image Understanding*, 106, 5-19.
3. Doretto, G., Chiuso, A., Wu, Y. N., and Soatto, S., (2003) Dynamic textures. *International Journal of Computer Vision*, 51, 91-109.

4. Zhu, S. C., Wu, Y. N., and Mumford, D. B. (1998) Minimax entropy principle and its application to texture modeling. *Neural Computation*, 9, 1627-1660.
5. Zhu, S. C., Wu, Y. N., and Mumford, D. B. (1997) Filter, Random field, And Maximum Entropy (FRAME): towards a unified theory for texture modeling. *International Journal of Computer Vision*, 27, 107-126.

Synergistic Activities

- Associate editor, *Journal of the American Statistical Association*. 2009-present.
- Associate editor, *Statistica Sinica*. 2000 - present.
- Reviewer for journals including *Annals of Statistics*, *Journal of American Statistical Association (JASA)*, *IEEE Pattern Analysis and Machine Intelligence (PAMI)*, *International Journal of Computer Vision (IJCV)*, etc., and publisher Springer.
- NSF panel, 2009. Guest editor for special issue on “Statistical Challenges and Advances in Brain Science” for *Statistica Sinica*, 2007. Organizer of Invited Session on Inverse Problem and Image Analysis, Joint Meeting of the Institute of Mathematical Statistics and the Chinese Society of Probability and Statistics. July 2005. Member of Program Committee of 2nd Workshop on Generative Model Based Vision, Washington, DC. June 2004. Organizer of Computer Vision Session in 34th Symposium on Interface. Montreal, April 2002. Organizer of Imaging and Vision Session in Joint Statistical Meeting, August 2002. Member of Organizing Committee of 1st Workshop on Generative Model Based Vision, Copenhagen, 2002.
- Invited seminars: U Penn, Department of Statistics, September 2009. UC Irvine, Department of Statistics, May 2008. Academia Sinica, Institute of Statistical Science, March 2008. Information Theory and Applications Workshop, UCSD, January 2008. International Symposium on Business and Industrial Statistics, Portugal, August 2007. Joint Statistical Meeting, Salt Lake City, July 2007. Graduate Summer School on Cognitive Science, UCLA, IPAM, July 2007. University of Illinois at Urbana-Champaign, Department of Statistics, April 2007.

Collaborators & Other Affiliations

Collaborators

Zhangzhong Si, UCLA; Chuck Fleming, UCLA; Haifeng Gong, UCLA; Leah O. Barrera, UCSD; Alessandro Chiuso, University of Padova; Gianfranco Doretto, General Electric; Roland Green, UCSD; Cheng-en Guo, Vident Corp.; Tae Hoon Kim, UCSD; Xiuwen Liu, Florida State; Chunxu Qu, UCSD; Bing Ren; UCSD; Steven Shoptaw, UCLA; Stefano Soatto, UCLA; Xiaowei Yang, UC-Davis; Alan Yuille, UCLA; Ming Zheng, Roche Research Lab.; Song-Chun Zhu, UCLA.

Graduate Advisor

Ph.D. thesis Advisor: Professor Donald B. Rubin, Department of Statistics, Harvard University.

Thesis Advisor

Ray-Bing Chen (Ph.D. 2003), He Hu (Ph.D. 2005, co-advisor), Ming Zheng (Ph.D. 2006), Jinhui Li (Ph.D., 2007), Nicole Chen (Ph.D. candidate), David Zes (Ph.D. candidate), Tess Nesbitt (Ph.D. candidate), Jiasheng You (Ph.D. student).