

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.

Publications

Five publications most closely related to the proposed project (ACHA and IJCV are flagship journals in their respective fields; ICLR is the premier peer-reviewed conference on deep learning)

1. Lu, Y., Zhu, S. C., and Wu, Y. N. (2015) Learning FRAME models using CNN filters for knowledge visualization. arXiv:1509.08379v2, under review.
2. Xie, J., Lu, Y., Zhu, S. C., and Wu, Y. N. (2015) Inducing wavelets into random fields via generative boosting. *Applied and Computational Harmonic Analysis (ACHA)*, in press.
3. Xie, J., Hu, W., Zhu, S. C., and Wu, Y. N. (2015). Learning sparse FRAME models for natural image patterns, *International Journal of Computer Vision (IJCV)*, 112, 221-238.
4. Dai, J., Lu, Y., and Wu, Y. N (2015) Generative modeling of convolutional neural networks. *International Conference on Learning Representations (ICLR)*. An expanded version has been accepted by a special issue on big data in *Statistics and Its Interfaces*.
5. Barbu, A., Wu, T., Wu, Y. N. (2014) Learning mixtures of Bernoulli templates by two-round EM with performance guarantee. *Electronic Journal of Statistics*, 8, 3004-3030.

Five other related publications (CVPR is a top-tier peer-reviewed conference on computer vision)

1. Chen, R. B., Chu, C. H., Yuan, S. and Wu, Y. N. (2015) Bayesian sparse group selection. *Journal of Computational and Graphical Statistics*, in press.
2. Wu, W. B. and Wu, Y. N. (2015) High-dimensional linear models with dependent observations. Revised for *Electronic Journal of Statistics*.
3. Hong, Y., Si, Z. Z., Hu, W. Z., Zhu S. C., and Wu, Y. N (2014). Unsupervised learning of compositional sparse code for natural image representation, *Quarterly of Applied Mathematics*, 72, 373-406

4. Xie, J., Hu, W., Zhu, S. C., and Wu, Y. N. (2014) Learning inhomogeneous FRAME models for object patterns, *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*.
5. Dai, J., Hong, Y., Hu, W., Zhu, S. C., and Wu, Y. N. (2014) Unsupervised learning of dictionaries of hierarchical compositional models. *Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*.

Synergistic Activities

- Associate editor, *Journal of the American Statistical Association*, Theory and Method, 2011-present. Associate editor, *Stat*, 2012-present. Associate editor, *Electronic Journal of Statistics*. 2013-present.
- One of the guest editors for the special issue on “Generative Models for Vision” for the journal of *Computer Vision and Image Understanding*, 2014.
- Organizer of a session on statistical modeling and learning in vision in the 2013 Spring Research Conference on Statistics in Industry and Technology, held from June 20 to 22, 2013.
- Invited speaker: An invited session on big data, JSM, Seattle, August 2015. Workshop on big data, Banff Center, February 2014.
- Seminars: University of Georgia, Department of Statistics, September 2015. Purdue University, Department of Statistics, October 2014. Academia Sinica, Institute of Statistics, September 2014. Florida State University, Department of Statistics, February 2014. UCLA, Department of Biostatistics, November 2013. University of Southern California, Department of Statistics, September 2013.

Collaborators & Other Affiliations

Collaborators

Ariana Anderson, UCLA; Adrian Barbu, Florida State U; Ray-Bing Chen, National Cheng Kung University; Jifeng Dai, Microsoft Research Asia; Wenzhe Hu, Snapchat; Grace Kim, UCLA; Yang Lu, UCLA; Shihao Shen, UCLA; Steven Shoptaw, UCLA; Zhangzhsng Si, Impossible Ventures; Jianwen Xie, UCLA; Yi Xing, UCLA; Tianfu Wu, UCLA; Wei Biao Wu, University of Chicago; Hong Yi, Warmartlab; Alan Yuille, UCLA; Quanshi Zhang, UCLA; Song-Chun Zhu, UCLA.

Graduate Advisor

Ph.D. thesis Advisor: 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), Tess Nesbitt (Ph.D. 2011), David Zes (Ph.D., 2013), Yi Hong (Ph.D. 2013, co-advisor), Jiasheng You (Ph.D., 2013, co-advisor), Nicole Chen (Ph.D., 2015), Jianwen Xie (Ph.D. candidate), Yi (Jacky) Yi (Ph.D. candidate), Levon Demirdjian (Ph.D student), Tian Han (Ph.D. candidate).