Sanmi Koyejo

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Education

University of Texas at Austin Austin, TX • M.S (May 2008) and Ph.D. (May 2013) Electrical Engineering, Advisor: Dr. Joydeep Ghosh, **Thesis:** Constrained relative entropy minimization with applications to multitask learning.

New Jersey Institute of Technology Newark, NJ • B.S. Electrical Engineering, Minor in Statistics, May 2005.

Selected Work Experience

Stanford University - PI: Russell A. Poldrack (08/2014 - present) Stanford, CA
Research Associate

- Development and analysis of methods for encoding and extracting structure in large scale scientific data, particularly neuroimaging and genetics data.

Imaging Research Center - PI: Russell A. Poldrack (11/2013 - 08/2014) Austin, TX
Research Associate

- Machine learning methods for joint analysis of imaging and genetics data.

Adometry (05/2010 - 05/2011) Austin, TX
Research Intern

- Large scale click rate prediction. Improved performance over production system by 15% (*Spring 2011*).
- Large scale hierarchical Bayesian models for smoothing click rate predictions (*Fall 2010*).
- Large scale post-processing methods for hierarchical smoothing of click rate predictions (*Summer 2010*).

Selected Publications

- Oluwasanmi Koyejo, Cheng Lee, and Joydeep Ghosh. A constrained matrix-variate gaussian process for transposable data. *Machine Learning*, 97(1-2):103–127, 2014
- Oluwasanmi Koyejo, David Reese McKay, Emma E.M. Knowles, John Blangero, David Glahn, and Russell A. Poldrack. Exploratory analysis of imaging and behavioral phenotypes with sparse CCA. In *Organization for Human Brain Mapping (Abstract)*, 2014
- Oluwasanmi Koyejo and Russell A. Poldrack. Decoding cognitive processes from functional MRI. In *NIPS Workshop on Machine Learning and Interpretation in Neuroimaging*, 2013
- Oluwasanmi Koyejo, Cheng Lee, and Joydeep Ghosh. Constrained Gaussian process regression for gene-disease association. In *ICDM Workshop on Biological Data Mining and its Applications in Healthcare*, 2013
- R. A. Poldrack, D. M. Barch, J. P. Mitchell, T. D. Wager, A. D. Wagner, J. T. Devlin, C. Cumba, O. Koyejo, and M. P. Milham. Towards open sharing of task-based fMRI data: The OpenfMRI project. *Frontiers in Neuroinformatics*, 7(12), 2013
- Oluwasanmi Koyejo, Sreangsu Acharyya, and Joydeep Ghosh. Retargeted matrix factorization. In *Proceedings of the seventh ACM conference on Recommender systems (Recsys)*, 2013
- Oluwasanmi Koyejo and Joydeep Ghosh. Constrained Bayesian inference for low rank multitask learning. In *Proceedings of the 29th conference on Uncertainty in artificial intelligence (UAI)*, 2013
- Oluwasanmi Koyejo, Priyank Patel, Joydeep Ghosh, and Russell A Poldrack. Learning predictive cognitive structure from fmri using supervised topic models. In *Pattern Recognition in Neuroimaging (PRNI), 2013 International Workshop on*, pages 9–12. IEEE, 2013
- Mijung Park*, Oluwasanmi Koyejo*, Joydeep Ghosh, Russell R. Poldrack, and Jonathan W. Pillow. Bayesian structure learning for functional neuroimaging. In *International Conference on Artificial Intelligence and Statistics (AISTATS)*, 2013
- Cheng Lee, Oluwasanmi Koyejo, and Joydeep Ghosh. Identifying candidate disease genes using a trace norm constrained bipartite raking model. In *IEEE Engineering in Medicine and Biology Society (EMBC)*, pages 3459–62, 2013
- Sreangsu Acharyya*, Oluwasanmi Koyejo*, and Joydeep Ghosh. Learning to rank with Bregman divergences and monotone retargeting. In *Proceedings of the 28th conference on Uncertainty in artificial intelligence (UAI)*, 2012
- Oluwasanmi Koyejo and Joydeep Ghosh. A kernel-based approach to exploiting interaction-networks in heterogeneous information sources for improved recommender systems. In *Proceedings of the 2nd International Workshop on Information Heterogeneity and Fusion in Recommender Systems (HETREC)*. ACM, 2011

Selected Honors / Leadership

Co-organizer ICML workshop on Divergence methods for probabilistic inference (2014), OHBM trainee abstract travel Award (2014), Co-chair AAAI symposium on manifold learning and its applications (2010), UAI Amazon best student paper award (2013), UAI travel award (2012), QUALCOMM "Q" Award of Excellence (2006, 2007), Outstanding NCE/ECE senior (2005), NJIT leadership award (2003).

*Equal Contribution.