Soumyadeep Chatterjee

Contact Information	609 Grand Fir Ave, Apt. 7 Sunnyvale, CA 94086	soumyachat@gmail.com Phone: 612-321-1212

Summary I have more than 5 years of experience in designing and implementing machine learning and data mining models and algorithms for predictive modeling. My work has focused on high-dimensional models for learning interactions and statistical relationships between large number of entities from limited training data.

Education

University of Minnesota, Minneapolis, MN

Ph.D., Computer Science & Engg., 2009 – August 2015 (*Expected*)

- Specialization: Machine Learning, Data Mining, Statistical Modeling
- Advisor: Arindam Banerjee, Ph.D
- GPA: 3.88/4.0

Jadavpur University, Kolkata, India

B.E., Dept. of Electronics & Telecomm. Engg., May 2005 – May 2009

- GPA: 9.35/10.0

Employment

Research Intern June 2014 – August 2014
Personalization Sciences,
Yahoo! Labs

Research Assistant May 2010 – present
Dept. of Computer Science & Engg.,
University of Minnesota, Twin Cities
Advisor: Arindam Banerjee, Ph.D.

Graduate School Fellow September 2009 – May 2012
Dept. of Computer Science & Engg.,
University of Minnesota, Twin Cities

Skills

- **Programming Languages:** Python, MATLAB, R, C++, Hadoop (basic), Java (basic)
- **Operating Systems:** Windows, Linux, Mac OS X
- **Coursework:** Machine Learning; Artificial Intelligence; Sparse Matrix Computations; Probability and Stochastic Processes; Graph Theory; Real Analysis; Information Theory and Coding; Software Engineering.

Publications

1. A. Asiaee Taheri, **S. Chatterjee** and A. Banerjee, "Regularized Structured Estimation in High-Dimensions with Noisy Designs" (preprint)
2. **S. Chatterjee**, S. Chen and A. Banerjee, "Generalized Dantzig Selector: Application to the k-support norm", Advances in Neural Information Processing Systems (NIPS), 2014.

3. A.Goncalves, P. Das, **S. Chatterjee**, V. Sivakumar, F. J. Von Zuben and A. Banerjee, "Multi-task Sparse Structure Learning", International Conference on Information and Knowledge Management (CIKM), 2014.

4. **S. Chatterjee** and A. Banerjee, "Fast Stochastic Metric Learning for Nearest Neighbor Classification" (preprint)

5. A. R. Ganguly, E. A. Kodra, A. Banerjee, S. Boriah, S. Chatterjee, **S. Chatterjee**, A. Choudhary, D. Das, J. Faghmous, P. Ganguli, S. Ghosh, K. Hayhoe, C. Hays, W. Hendrix, Q. Fu, J. Kawale, D. Kumar, V. Kumar, S. Liess, R. Mawalagedara, V. Mithal, R. Oglesby, K. Salvi, P. K. Snyder, K. Steinhaeuser, D. Wang and D. Wuebbles, "Toward enhanced understanding and prediction of climate extremes using physics-guided data mining techniques". Nonlinear Processes in Geophysics, 2014.

6. H. Wang, F. Fazayeli, **S. Chatterjee** and A. Banerjee, "Gaussian Copula Precision Estimation with Missing Values", International Conference on Artificial Intelligence and Statistics (AISTATS), 2014.

7. **S. Chatterjee**, A. Banerjee, S. Chatterjee and A. Ganguly, "Mixture of Regression Models for Precipitation Prediction", The Second International Workshop on Climate Informatics (CI), 2012.

8. **S. Chatterjee**, K. Steinhaeuser, A. Banerjee, S. Chatterjee and A. Ganguly, "Sparse Group Lasso: Consistency and Climate Applications", SIAM Intl. Conference on Data Mining 2012 (**Best Student Paper Award**).

9. **S. Chatterjee**, K. Bhattacharjee and A. Konar, "A Simple and Robust Algorithm for Microarray Data Clustering Based on Gene Population-Variance Ratio Metric", Biotechnology Journal, Vol. 4, Issue 9, 2009.

10. K. Bhattacharjee, **S. Chatterjee** and A. Konar, "A Novel Clustering Method for Gene Microarray Data Using Intra-Cluster Distance and Variance", IEEE Intl. Advanced Computing Conference, 2009 (IACC-09).

11. **S. Chatterjee**, K. Bhattacharjee, A. Konar and A. Nagar, "A Robust Clustering Method for Gene Microarray Data Using Genetic Algorithm", European Modeling Symposium, 2008 (EMS-08), September 2008.

Awards & Scholarships

- Best Student Paper Award at the SIAM International Conference on Data Mining (SDM), 2012.
- Travel Fellowship for poster presented at The Second International Workshop on Climate Informatics 2012.
- Travel Award for paper presented at SDM 2012.
- 3 year Graduate School Fellowship (2009-2012) from Univ. of Minnesota Twin Cities.
- 4-year J. C. Bose National Science Talent Search (JBNSTS) Senior Scholarship, 2005–2009.