

## Data Mining Methods for Anomaly Detection, August 21, 2005

### Workshop Schedule

- 8:30 *Opening Remarks*
- 8:40 *“Multi-Stage Classification”* – Ted Senator
- 9:10 *“Population-Wide Anomaly Detection”* – Weng-Keen Wong, Gregory Cooper, Denver Dash, John Levander, John Dowling, William Hogan, Michael Wagner
- 9:30 *“Strip Mining the Sky: The CTI-II Transit Telescope Survey”* – Peter Zimmer and John McGraw
- 9:50 *“Learning to Live with False Alarms”* – Chris Drummond, Rob Holte
- 10:10 *Coffee Break*
- 10:30 *“Trajectory Boundary Modeling of Time Series for Anomaly Detection”* – Matthew Mahoney and Philip Chan
- 11:00 *“Provably Fast Algorithms for Anomaly Detection”* – Don Hush, Patrick Kelly, Clint Scovel, and Ingo Steinwart
- 11:30 *“Filtering Search Engine Spam based on Anomaly Detection Approach”* – Kazumi Saito and Naonori Ueda
- 11:50 *“Discovering hidden association rules”* – Marco-Antonio Balderas, Fernando Berzal, Juan-Carlos Cubero, Eduardo Eisman, Nicolás Marín Balderas
- 12:10 *“Multivariate dependence among extremes, abrupt change and anomalies in space and time for climate applications”* – Auroop Ganguly, P. Mitra, G. Wiederhold, D. Lambert, G. Cybenko, N. Forbes, A. Gupta
- 12:30 *Lunch Break*
- 1:30 *“Anomalous Spatial Cluster Detection”* – Daniel Neill, Andrew Moore
- 2:00 *“Current and Potential Statistical Methods for Anomaly Detection in Modern Time Series Data: The case of BioSurveillance”* – Galit Shmueli
- 2:30 *“An Empirical Comparison of Outlier Detection Algorithms”* – Matthew Eric Otey, Srinivasan Parthasarathy, Amol Ghoting
- 2:50 *“Outlier Detection in High-Dimensional Data - Using Exact Mapping to a Relative Distance Plane”* – Ray Somorjai
- 3:15 *Coffee Break*
- 3:30 *“Detecting Anomalous Patterns in Pharmacy Retail Data”* – Maheshkumar Sabhnani, Daniel Neill, Andrew Moore, Fu-Chiang Tsui, Michael Wagner, Jeremy Espino
- 3:50 *“A Comparison of Generalizability for Anomaly Detection”* – Gilbert Peterson, Robert Mills, Brent McBride, Wesley Allred
- 4:10 *“An Empirical Bayes Approach to Detect Anomalies in Dynamic Multidimensional Arrays”* – Deepak Agarwal
- 4:30 *Discussions*
- 5:00 *Adjourn*