

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

**DATA MINING**  
**THESIS PRESENTATION**

**Friday, May 6**  
**2:00 – 3:00 pm in MS 101**

**Comparing Unsupervised  
Multivariate Normal Cluster  
Results *between* Datasets and  
Consolidating Similar  
Clusters**

**Eric Taylor**

(MS candidate in Data Mining)

**Abstract**

Data availability and/or computing constraints may necessitate unsupervised cluster analysis be performed using stratified subsets of the data. When the analysis is done, each stratified dataset has its own cluster results. How can the analyst compare and combine the information between datasets – while retaining the information gleaned from each? We will examine a method that compares (via Hotelling's  $T^2$ ) multivariate normal cluster results *between* datasets and consolidates (via Bayes' Theorem) those that are similar. The result allows the analyst to perform incremental analyses on large/sporadic datasets – with a little upfront planning.

**Refreshments will be served.**

***For further information:***

***[gotchevi@ccsu.edu](mailto:gotchevi@ccsu.edu)*** (860) 832-2839