Hanna Lukashelevich
Fraunhofer IDMT, Ilmenau
hält im Rahmen des Graduiertenkollegs
"Statistische Modellbildung"
einen Vortrag zum Thema:

Applying Constrained Clustering for Active Exploration of Music Collections

We investigate the capabilities of constrained clustering in application to active exploration of music collections. Constrained clustering has been developed to improve clustering methods through pairwise constraints. These constraints are received as queries from a noiseless oracle. In this talk we discuss two methods for the improvement of the constrained clustering. First, most of the methods involve a random procedure stage to decide which elements are presented to the oracle. We apply spectral clustering with constraints to a music dataset, where the queries for constraints are selected in a deterministic way through outlier identification perspective. Second, although the constraints enhance the similarity relations between the items, the clustering is conducted in the static feature space. We embed the information about the constraints to a feature selection procedure, that adapts the feature space regarding the constraints. We simulate the constraints through the ground-truth music genre labels. The results show that constrained clustering with deterministic outlier identification method achieves reasonable and stable results through the increment of the number of constraint queries. An expected improvement is also obtained by embedding the constraints into feature selection procedure.

Donnerstag, 10. Februar 2011
14:15 - 16:00, M/E21

Die Hochschullehrerinnen und Hochschullehrer des Graduiertenkollegs laden herzlich zu den Vorträgen ein!

Weitere Informationen über den Kursinhalt können Sie dem Internet entnehmen:
http://www.statistik.tu-dortmund.de/forschung.html
http://www.statistik.tu-dortmund.de/veranstaltungengradkolleg.html