

The IEEE CIS Tunisia Chapter
is inviting all interested IEEE members and researchers
to a seminars presented by



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November 5, 2009 at 3:00p.m.: *Visual Clustering in Relational Data*

3 hours: fuzzy content = 0%: accessible to anyone with some math and computing background: relevant to many applications, especially in the fields of in Data Mining and Bioinformatics.

Abstract: This talk begins by defining the three canonical problems of clustering (assessment, clustering, validation). Then I will give a brief history of visual approaches to these three problems. Following this, I will discuss a little theory and some applications of (8) visual algorithms. I will explain how each of these algorithms operates, and illustrate various facets of each with some simple examples.

November 6, 2009 at 9:30a.m.: *Fuzzy clustering in very large data sets*

3 hours: fuzzy content = 90%: accessible to anyone with a pretty good math and computing background: relevant to many applications in Data mining, Image Processing, and Pattern Recognition.

Abstract: This talk focusses on adaptations of the fuzzy c-means, expectation-maximization, and non-Euclidean relational c-means clustering algorithms for use with very large data sets. I will discuss three cases, according as the data are image data, feature vector data, or square relational data. There are two general approaches to such problems: distributed clustering on many processors; or sampling and extension. The methods I discuss are based on sampling+extension. I will show that sampling needs to be different for each case, and extension follows naturally for many clustering algorithms from first order necessary conditions for the models being generalized. Numerical examples illustrate each approach. The results I present in this talk are ok, but there is plenty of room for improvement.

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Place: **Vincci Djerba Resort 4* Hotel – Tunisia**

WELCOME!