



Πανεπιστήμιο Κύπρου  
University of Cyprus

School of Engineering  
Department of Electrical and  
Computer Engineering



## Department of Electrical and Computer Engineering

**Title: « *Every Picture Tells a Story – Visual Cluster Analysis* »**

**Prof. James C. Bezdek**

Computation Intelligence Society (CIS) Distinguished Lecturer

**Wednesday, 31<sup>th</sup> October 2012, 17:00 – 18:30**

**Room XWD01-110, New Campus  
University of Cyprus**

### **Abstract:**

The talk overviews the history of Visual Clustering, which began thousands of years ago. The first image for this appeared in 1873. Three algorithms for visual assessment of clustering tendency examined, namely the VAT, iVAT and asiVAT, with applications to social network analysis. Particularly three applications, one for each algorithm will be discussed: time series analysis with clusters of linguistic medoid prototypes in Eldercare data (iVAT); social network analysis with Sampson's Monastery data (asiVAT); and network access security (VAT), a commercial application developed by CA technologies.

### **Biography:**

Prof. James (Jim) Bezdek received the PhD in Applied Mathematics from Cornell University in 1973. Jim is past president of NAFIPS (North American Fuzzy Information Processing Society), IFSA (International Fuzzy Systems Association) and the IEEE CIS (Computational Intelligence Society). He is the Founding Editor of the Int. Journal of Approximate Reasoning and the IEEE Transactions on Fuzzy Systems, and he is a Life Fellow of the IEEE and IFSA. He is the recipient of the IEEE 3rd Millennium, Medal, IEEE CIS Fuzzy Systems Pioneer Award, and IEEE Rosenblatt Award. Jim's interests: woodworking, optimization, motorcycles, pattern recognition, cigars, clustering in very large data, fishing, co-clustering, blues music, wireless sensor networks, poker and visual clustering. Jim retired in 2007, and will be coming to a university near you soon.