

Prof. James Bezdek



Prof. James C. Bezdek is recognized as one of the most important researchers in the world in the field of fuzzy systems for pattern recognition. He 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 founding editor of the International Journal on Approximate Reasoning and the IEEE Transactions on Fuzzy Systems. He is Fellow member of the IEEE and IFSA, and recipient of the IEEE 3rd Millennium, IEEE CIS Fuzzy Systems Pioneer, and IEEE CIS Rosenblatt medals. He is author of the fuzzy c-means (FCM) algorithm, considered one of the most important discoveries in fuzzy pattern recognition and related areas and the clustering algorithm of choice for most practitioners in fuzzy exploratory data analysis. The original model has inspired many applications in related areas of pattern recognition and image processing. Areas of research benefiting from Dr. Bezdek's work include diagnostic medicine, economics, chemistry, image processing, meteorology, web mining, geology, target recognition, regression analysis, document retrieval, structural failure and irrigation models. One of the most notable applications has been in medical image analysis, where FCM segmentation of magnetic resonance images is used in conjunction with rule-based analysis for both diagnosis and pre-operative planning for brain tumor patients. Dr. Bezdek also has made pioneering contributions in deriving the theories for clustering of relational (Euclidean and non-Euclidean) data. Dr. Bezdek is Honorary Senior Fellow Professor at University of Melbourne, and the Nystul Professor and Eminent Scholar at the University of West Florida in Pensacola.