

University of Baghdad

College Name	College of Science for Women		
Department	Computer Science		
Full Name as written in Passport	Nushwan Yousif BAITHOON		
e-mail	nybalnakash@yahoo.com , nushwan.compu@cs.w.uobaghdad.edu.iq		
Career	<input type="radio"/> Assistant Lecturer	<input type="radio"/> Lecturer	<input checked="" type="radio"/> Assistant Professor
			<input type="radio"/> Professor
Research Title	A Diminution Method for Large Multi-dimensional Data Retrieval		
Shared or Single	<input type="radio"/> Shared name		<input checked="" type="radio"/> Single
Published Journal title	Journal of Applied Computer Science & Mathematics, Suceava-Romania		
Volume Number	Issue No. 8(4)		
Page	15-19		
Year	2010		
Abstract	<p>The intention of this work is to introduce a method of compressing data at the transmitter (source) and expanding it at the receiver (destination). The amount of data compression is directly related to data dimensionality, hence, for example an N by N RGB image file is considered to be an M-D, with M=3, image data file. Also, the amount of scatter in an M-D file, hence, the covariance matrix is calculated, along with the average value of each dimension, to represent the signature or code for each individual data set to be sent by the source. At the destination random sets can test a particular received signature so that only one set is acceptable thus giving the corresponding intended set to be received. Sound results are obtained depending on the constrains being implemented. These constrains are user tolerant in so far as how well tuned or rapid the information is to be processed for data retrieval. The proposed method is well suited in application areas where both source and destination are communicating using the same sets of data files at each end. Also such a technique is feasible for the availability of fast microprocessors and frame-grabbers.</p> <p><i>Keywords:</i> Covariance matrices, M Dimensional data, Data retrieval, Data Compression, Pattern vector.</p>		

