Meeting: 1006, Lubbock, Texas, SS 13A, Special Session on Statistical Image Processing and Analysis and Applications

1006-94-180 Jiangling Guo\* (jiangling.guo@ttu.edu), Dept. of Electrical Engineering, Texas Tech University, Lubbock, TX 79409, and Sunanda Mitra (sunanda.mitra@coe.ttu.edu), Dept. of Electrical Engineering, Texas Tech University, Lubbock, TX 79409. A Simplified Enhanced LBG Algorithm. Preliminary report.

A Simplified Enhanced LBG algorithm of vector quantization will be presented. As opposed to the Enhanced LBG algorithm, the new algorithm does not limit the cluster splitting and merging to only three clusters at a time, but performs on all the clusters generated. The algorithm thus achieves more optimal solutions, and at the same time has much lower complexity comparing to the Enhanced LBG algorithm. The proposed algorithm was originally developed for Hybrid Vector Scalar Quantization for image, but can also be applied to general vector quantization. (Received February 14, 2005)