Compaction of Ordered Dithered Images with Arithmetic Coding

Y. Lin
Department of Electrical Engineering
National Central University, Chung Li
Taiwan 32054, R. O. C.

Abstract- Ordered dither is considered to be a simple and effective method among all halftoning techniques. In this talk, compaction of ordered dithered images using arithmetic coding is studied. A preprocessor referred to as pixel interleaving (i.e., grouping pixels with similar dithering thresholds) is employed in such a way that dithered images can be efficiently coded with the JBIG code and high compressibility can be achieved. Experimental results reveal that the 4-pixel interleaving achieves the best compression performance.