



A MULTISCALE COLOR QUANTIZATION ALGORITHM FOR PRODUCING SCALABLE MEDIA (WedAmPO3)

Author(s): Yik–Hing Fung (The Hong Kong Polytechnic University, Hong Kong)

Yuk-Hee Chan (The Hong Kong Polytechnic University, Hong Kong)
Ka-Chun Lui (The Hong Kong Polytechnic University, Hong Kong)

* Abstract : To reliably and efficiently deliver media information to diverse clients over heterogeneous networks, the

media involved must be scalable. In this paper, a color quantization algorithm for generating scalable images is proposed based on a multiscale error diffusion framework. Images of lower resolutions are embedded in the outputs such that a simple downsampling process can extract images of any desirable resolutions. Images possessing this scalable property support transmission over the Internet which contains clients with different display resolutions, systems with different caching resources and networks with varying bandwidths

and QoS capabilities.