



Department of Computer Science
Research Seminars 2010

Recent Research Results in Image and Video Processing

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Place: 155, Coates Hall

Abstract

In this talk we provide an overview of some of our recent research results in image and video processing. In particular, we describe research results in three specific areas: Image analysis, image filtering, and image and video compression. Topics discussed under the first category are camera calibration, color image segmentation and image resizing. Topics discussed under the second category are impulse noise removal, color image filtering and contrast enhancement. Finally, topics discussed under the third category are image compression using subband DCT, image compression using perfect reconstruction IIR QMF banks, and rate-distortion analysis of images and videos.

BIO:

Ph. D in Electrical Engineering, 1962, University of California, Berkeley, CA. Dr. Mitra received the B.Sc.(Hons.) degree in Physics from Utkal University, India in 1953, M.Sc.(Tech.) degree in Radio Physics from the university of Calcutta, India in 1958, and his M.S and Ph. D. degrees in Electrical Engineering from University of California, Berkeley, California in 1960 and 1962, respectively. He joined the Department of Electrical Engineering –Systems as the Stephen and Etta Varra Professor in July 2006. He has published over 640 papers in the areas of analog and digital signal processing, and image processing. He has also authored and co-authored twelve books, and holds five patents.