Elektrotechnik-Elektronik-Informationstechnik

EEI KOLLOQUIUM

IMAGE PROCESSING USING QUADRATIC VOLTERRA FILTERS

Professor Sanjit K. Mitra

University of California, Santa Barbara, California and
University of Southern California, Los Angeles, California

Donnerstag, der 25.07.2013, 14^{00} Uhr (Sondertermin)
Cauerstraße 7, Raum N5.17
Diskussionsleitung: Prof. Dr.-Ing. A. Kaup

Two-dimensional quadratic Volterra operators developed for edge enhancement are reviewed. A number of practical image processing applications of these filters are then considered and the proposed algorithms are outlined. These applications include image contrast enhancement, impulse noise removal, image zooming, and image half-toning. In each of these applications, it is shown that the processed images appear perceptually much better in quality than those obtained using many other well-known methods