

1. Record Nr.	UNIORUON00207890
Autore	ROSE, Lisle A.
Titolo	The long shadow : reflections on the second world war era / Lisle A. Rose
Pubbl/distr/stampa	London, : Greenwood, 1978. 224 p. ; 21 cm.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
2. Record Nr.	UNINA9910437576903321
Autore	Shukla K. K
Titolo	Efficient algorithms for discrete wavelet transform : with applications to denoising and fuzzy inference systems // K. K. Shukla, Arvind K. Tiwari
Pubbl/distr/stampa	London, : Springer London, : Imprint : Springer, 2013
ISBN	1-4471-4941-6
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (ix, 91 pages) : illustrations (some color)
Collana	SpringerBriefs in computer science
Altri autori (Persone)	TiwariArvind K
Disciplina	515.723
Soggetti	Digital images - Mathematics Wavelets (Mathematics)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 2191-5768."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Filter Banks and DWT -- Finite Precision Error Modeling and Analysis -- PVM Implementation of DWT-Based Image Denoising -- DWT-Based Power Quality Classification -- Conclusions and Future Directions.
Sommario/riassunto	Transforms are an important part of an engineer's toolkit for solving signal processing and polynomial computation problems. In contrast to the Fourier transform-based approaches where a fixed window is used uniformly for a range of frequencies, the wavelet transform uses short windows at high frequencies and long windows at low frequencies. This way, the characteristics of non-stationary disturbances can be more

closely monitored. In other words, both time and frequency information can be obtained by wavelet transform. Instead of transforming a pure time description into a pure frequency description, the wavelet transform finds a good promise in a time-frequency description. Due to its inherent time-scale locality characteristics, the discrete wavelet transform (DWT) has received considerable attention in digital signal processing (speech and image processing), communication, computer science and mathematics. Wavelet transforms are known to have excellent energy compaction characteristics and are able to provide perfect reconstruction. Therefore, they are ideal for signal/image processing. The shifting (or translation) and scaling (or dilation) are unique to wavelets. Orthogonality of wavelets with respect to dilations leads to multigrid representation. The nature of wavelet computation forces us to carefully examine the implementation methodologies. As the computation of DWT involves filtering, an efficient filtering process is essential in DWT hardware implementation. In the multistage DWT, coefficients are calculated recursively, and in addition to the wavelet decomposition stage, extra space is required to store the intermediate coefficients. Hence, the overall performance depends significantly on the precision of the intermediate DWT coefficients. This work presents new implementation techniques of DWT, that are efficient in terms of computation requirement, storage requirement, and with better signal-to-noise ratio in the reconstructed signal.

---