

1. Record Nr.	UNINA9910954462503321
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Titolo	Remote Sensing Digital Image Analysis : An Introduction / / by John A. Richards
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 1993
ISBN	3-642-88087-8
Edizione	[2nd ed. 1993.]
Descrizione fisica	1 online resource (xx, 340 pages) : 174 illustrations
Disciplina	621.36/78
Soggetti	Geographic information systems Refuse and refuse disposal Pollution Soil science Noise control Geographical Information System Waste Management/Waste Technology Soil Science Noise Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
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Sommario/riassunto

Possibly the greatest change confronting the practitioner and student of remote sensing in the period since the first edition of this text appeared in 1986 has been the enormous improvement in accessibility to image processing technology. Falling hardware and software costs, combined with an increase in functionality through the development of extremely versatile user interfaces, has meant that even the user unskilled in computing now has immediate and ready access to powerful and flexible means for digital image analysis and enhancement. An understanding, at algorithmic level, of the various methods for image processing has become therefore even more important in the past few years to ensure the full capability of digital image processing is utilised. This period has also been a busy one in relation to digital data supply. Several nations have become satellite data gatherers and providers, using both optical and microwave technology. Practitioners and researchers are now faced, therefore, with the need to be able to process imagery from several sensors, together with other forms of spatial data. This has been driven, to an extent, by developments in Geographic Information Systems (GIS) which, in turn, have led to the appearance of newer image processing procedures as adjuncts to more traditional approaches.
