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Nota di contenuto	Contents; Preface; 1. Preliminaries; 1.1 Introduction; 1.2 State of the Art; 1.2.1 Optical Character Recognition; 1.2.2 Handwritten Text Recognition; 1.3 Formal Background; 1.3.1 Hidden Markov Models; Continuous HMM; Basic algorithms for HMMs; The Decoding Problem and the Viterbi Algorithm; The Learning Problem and the Baum-Welch Algorithm; 1.3.2 Language models: N-grams; n-grams modelled by a stochastic finite state automaton; 1.3.3 Interactive Pattern Recognition; 1.3.4 Word-graphs; 1.4 Assessing Computer Assisted Transcription of Handwritten Text Images; 2. Corpora; 2.1 Introduction 2.2 CS2.3 ODEC; 2.4 IAMDB; 2.5 UNIPEN; 3. Handwritten Text Recognition; 3.1 Introduction; 3.2 Off-line Handwritten Text Recognition; 3.2.1 Preprocessing; 3.2.2 Feature Extraction; 3.2.3 Recognition; 3.2.4 Experimental Framework; 3.2.5 Meta-parameter Adjustment Experiments; 3.2.6 Discussion of Results; 3.3 On-line Handwritten Text Recognition; 3.3.1 Preprocessing; 3.3.2 Feature Extraction; 3.3.3 Recognition; 3.3.4 Experimental Framework; 3.3.5 Results; 3.4 Summary and Conclusions; 4. Computer Assisted

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## Sommario/riassunto

This book presents an interactive multimodal approach for efficient transcription of handwritten text images. This approach, rather than full automation, assists the expert in the recognition and transcription process. Until now, handwritten text recognition (HTR) systems are far from being perfect and heavy human intervention is often required to check and correct the results of such systems. The interactive scenario studied in this book combines the efficiency of automatic handwriting recognition systems with the accuracy of the experts, leading to a cost-effective perfect transcription of th

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