

1. Record Nr.	UNINA9910350231903321
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Titolo	Online Visual Tracking // by Huchuan Lu, Dong Wang
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-13-0469-6
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (X, 128 p. 115 illus., 44 illus. in color.)
Disciplina	006.6 006.37
Soggetti	Optical data processing Pattern perception Data mining Image Processing and Computer Vision Pattern Recognition Data Mining and Knowledge Discovery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction to visual tracking -- 2. Visual Tracking based on Sparse Representation -- 3. Visual Tracking based on Local Model -- 4. Visual Tracking based on Model Fusion -- 5. Tracking by Segmentation -- 6. Correlation Tracking -- 7. Visual Tracking based on Deep Learning -- 8. Conclusions and Future Work.
Sommario/riassunto	This book presents the state of the art in online visual tracking, including the motivations, practical algorithms, and experimental evaluations. Visual tracking remains a highly active area of research in Computer Vision and the performance under complex scenarios has substantially improved, driven by the high demand in connection with real-world applications and the recent advances in machine learning. A large variety of new algorithms have been proposed in the literature over the last two decades, with mixed success. Chapters 1 to 6 introduce readers to tracking methods based on online learning algorithms, including sparse representation, dictionary learning, hashing codes, local model, and model fusion. In Chapter 7, visual tracking is formulated as a foreground/background segmentation problem, and tracking methods based on superpixels and end-to-end

deep networks are presented. In turn, Chapters 8 and 9 introduce the cutting-edge tracking methods based on correlation filter and deep learning. Chapter 10 summarizes the book and points out potential future research directions for visual tracking. The book is self-contained and suited for all researchers, professionals and postgraduate students working in the fields of computer vision, pattern recognition, and machine learning. It will help these readers grasp the insights provided by cutting-edge research, and benefit from the practical techniques available for designing effective visual tracking algorithms. Further, the source codes or results of most algorithms in the book are provided at an accompanying website.
