Record Nr. UNINA9910465491003321 Autore Farmer Michael E. **Titolo** Application of chaos and fractals to computer vision / / by Michael E. Farmer Pubbl/distr/stampa Sharjah, United Arab Emirates:,: Bentham Science Publishers,, 2014 ©2014 **ISBN** 1-60805-900-6 Descrizione fisica 1 online resource (333 p.) Disciplina 006.37 Soggetti Computer vision Chaotic behavior in systems Fractal analysis Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Cover; Title; EUL; Dedication; Contents; Biography; Foreword; Preface; Nota di contenuto Chapter 01; Chapter 02; Chapter 03; Chapter 04; Chapter 05; Chapter 06; Chapter 07; Chapter 08; Chapter 09; Chapter 10; References; Author Index; Index This book provides a thorough investigation of the application of chaos Sommario/riassunto theory and fractal analysis to computer vision. The field of chaos theory has been studied in dynamical physical systems, and has been very successful in providing computational models for very complex problems ranging from weather systems to neural pathway signal propagation. Computer vision researchers have derived motivation for their algorithms from biology and physics for many years as witnessed

by the optical flow algorithm, the oscillator model underlying graphical

cuts and of course neural networks. These algorithm