1. Record Nr. UNINA9910480835003321

Autore	Coulombel Jean-Francois
Titolo	Geometric optics for surface waves in nonlinear elasticity / / Jean-Francois Coulombel, Mark Williams
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , [2020] ©2020
ISBN	1-4704-5650-8
Descrizione fisica	1 online resource (164 pages)
Collana	Memoirs of the American Mathematical Society ; ; number 1271
Disciplina	530.4/16
Soggetti	Partial differential equations -- Hyperbolic equations and systems [See also 58J45] -- Nonlinear second-order hyperbolic equations Optics, electromagnetic theory {For quantum optics, see 81V80} -- General -- Geometric optics Mechanics of deformable solids -- Elastic materials -- Nonlinear elasticity Geometrical optics - Mathematics Nonlinear difference equations Elasticity Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Derivation of the weakly nonlinear amplitude equation -- Existence of exact solutions -- Approximate solutions -- Error analysis and proof of Theorem 3.8 -- Some extensions.

2. Record Nr. UNINA9910254314603321

Autore	Corke Peter I. <1959->
Titolo	Robotics, Vision and Control : Fundamental Algorithms In MATLAB® Second, Completely Revised, Extended And Updated Edition / / by Peter Corke
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
ISBN	3-319-54413-6 9783319544120
Edizione	[2nd ed. 2017.]
Descrizione fisica	1 online resource (xxix, 693 pages)
Collana	Springer Tracts in Advanced Robotics, , 1610-7438 ; ; 118
Disciplina	629.892
Soggetti	Robotics Automation Artificial intelligence Automatic control Optical data processing Signal processing Image processing Speech processing systems Cognitive psychology Robotics and Automation Artificial Intelligence Control and Systems Theory Image Processing and Computer Vision Signal, Image and Speech Processing Cognitive Psychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Additional material provided at www.petercorke.com/RVC."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part I Foundations -- Part II Mobile Robots -- Part III Arm-type Robots -- Part IV Vision -- Part V Robotics and Vision.
Sommario/riassunto	Robotic vision, the combination of robotics and computer vision, involves the application of computer algorithms to data acquired from

sensors. The research community has developed a large body of such algorithms but for a newcomer to the field this can be quite daunting. For over 20 years the author has maintained two open-source MATLAB® Toolboxes, one for robotics and one for vision. They provide implementations of many important algorithms and allow users to work with real problems, not just trivial examples. This book makes the fundamental algorithms of robotics, vision and control accessible to all. It weaves together theory, algorithms and examples in a narrative that covers robotics and computer vision separately and together. Using the latest versions of the Toolboxes the author shows how complex problems can be decomposed and solved using just a few simple lines of code. The topics covered are guided by real problems observed by the author over many years as a practitioner of both robotics and computer vision. It is written in an accessible but informative style, easy to read and absorb, and includes over 1000 MATLAB and Simulink® examples and over 400 figures. The book is a real walk through the fundamentals of mobile robots, arm robots. then camera models, image processing, feature extraction and multi-view geometry and finally bringing it all together with an extensive discussion of visual servo systems. This second edition is completely revised, updated and extended with coverage of Lie groups, matrix exponentials and twists; inertial navigation; differential drive robots; lattice planners; pose-graph SLAM and map making; restructured material on arm-robot kinematics and dynamics; series-elastic actuators and operational-space control; Lab color spaces; light field cameras; structured light, bundle adjustment and visual odometry; and photometric visual servoing. “An authoritative book, reaching across fields, thoughtfully conceived and brilliantly accomplished!” OUSSAMA KHATIB, Stanford.