Record Nr. UNINA9910826470003321

Autore Mellody Maureen

Titolo Robust methods for the analysis of images and videos for fisheries

stock assessment: summary of a workshop // National Research

Council of the National Academies; Maureen Mellody, rapporteur

Washington, District of Columbia:,: The National Academies Press,,

2014 ©2014

ISBN 0-309-31472-0

0-309-31470-4

Descrizione fisica 1 online resource (88 p.)

Disciplina 333.956

Pubbl/distr/stampa

Soggetti Fish stock assessment

United States

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Description based upon print version of record.

Includes bibliographical references. Nota di bibliografia

""FrontMatter""; ""Acknowledgment of Reviewers""; ""Contents""; ""1 Nota di contenuto

Introduction""; ""2 Setting the Stage""; ""3 Multi-Modal Sensing""; ""4 Image Processing and Detection""; ""5 Multi-Object Tracking""; ""6 Shape and Motion Analysis""; ""7 Identification and Classification""; ""8 Strategies Going Forward""; ""References""; ""Appendixes""; ""Appendix

A: Registered Workshop Participants""; ""Appendix B: Workshop

Agenda""; ""Appendix C: Acronyms""

Sommario/riassunto "The National Marine Fisheries Service (NMFS) is responsible for the

> stewardship of the nation's living marine resources and their habitat. As part of this charge, NMFS conducts stock assessments of the abundance and composition of fish stocks in several bodies of water. At present, stock assessments rely heavily on human data-gathering and analysis. Automatic means of fish stock assessments are appealing because they offer the potential to improve efficiency and reduce human workload and perhaps develop higher-fidelity measurements. The use of images and video, when accompanies by appropriate statistical analyses of the inferred data, is of increasing importance for estimating the abundance of species and their age distributions.

Robust Methods for the Analysis of Images and Videos for Fisheries

Stock Assessment is the summary of a workshop convened by the National Research Council Committee on Applied and Theoretical Statistics to discuss analysis techniques for images and videos for fisheries stock assessment. Experts from diverse communities shared perspective about the most efficient path toward improved automation of visual information and discussed both near-term and long-term goals that can be achieved through research and development efforts. This report is a record of the presentations and discussions of this event."--