Record Nr. UNINA9911006793403321 UAV cooperative decision and control: challenges and practical **Titolo** approaches / / edited by Tal Shima, Steven Rasmussen Pubbl/distr/stampa Philadelphia, Pa.,: Society for Industrial and Applied Mathematics (SIAM, 3600 Market Street, Floor 6, Philadelphia, PA 19104), 2009 **ISBN** 1-68015-787-6 0-89871-858-9 Descrizione fisica 1 electronic text (xxii, 164 p.) : ill. (some col.), digital file Collana Advances in design and control;; 18 Altri autori (Persone) ShimaTal RasmussenSteven J Disciplina 358.4/5 Soggetti Drone aircraft - Control systems Drone aircraft - Automatic control Task analysis **Decision making** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Introduction -- Challenges -- Single-Task Tours -- Multiple Assignments -- Simultaneous Multiple Assignments -- Estimation Algorithms for Improved Cooperation Under Uncertainty --Effectiveness Measures for Operations in Uncertain Environments -- A MultiUAV Simulation -- B Path Planning for UAVs. Sommario/riassunto Unmanned aerial vehicles (UAVs) are increasingly used in military missions because they have the advantages of not placing human life at risk and of lowering operation costs via decreased vehicle weight. These benefits can be fully realized only if UAVs work cooperatively in groups with an efficient exchange of information. This book provides an authoritative reference on cooperative decision and control of UAVs and the means available to solve problems involving them.