

1. Record Nr.	UNINA9910454655503321
Titolo	Review of the space communication program of NASA's Space Operations Mission Directorate [[electronic resource] /] / Committee to Review NASA's Space Communication Program, Aeronautics and Space Engineering Board, Division on Engineering and Physical Sciences, National Research Council of the National Academies
Pubbl/distr/stampa	Washington, D.C., : The National Academies Press, c2007
ISBN	1-280-74250-X 9786610742509 0-309-66447-0
Descrizione fisica	1 online resource (98 p.)
Disciplina	629.47/43
Soggetti	Astronautics - Communication systems Space flights Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	ncludes bibliographical references.
Nota di contenuto	""Front Matter""; ""Acknowledgment of Reviewers""; ""Contents""; ""Executive Summary""; ""1 Introduction""; ""Assessment of Operational Networks""; ""2 Space Network Program Element Assessment""; ""3 NASA Integrated Services Network""; ""Assessment of Other Program Elements""; ""4 Spectrum Management""; ""5 Data Standards Management""; ""6 Search and Rescue""; ""7 Communications and Navigation Architecture""; ""8 Technology""; ""9 Operations Integration Program Element""; ""General Issues""; ""10 Overarching Issues and Recommendations""; ""Appendixes""; ""A Statement of Task"" ""B Committee Member Biographies""""C Acronyms""

2. Record Nr.	UNINA9910715527203321
Titolo	Capture of the Mexican brig Urrea. Message from the President of the United States, in answer to a resolution of the House of Representatives of the 5th instant, respecting the capture and restoration of the Mexican brig of war Urrea. January 8, 1838. Referred to the Committee on Foreign Affairs
Pubbl/distr/stampa	[Washington, D.C.] : , : [publisher not identified], , 1838
Descrizione fisica	1 online resource (46 pages)
Collana	House document / 25th Congress, 2nd session. House ; ; no. 75 [United States congressional serial set] ; ; [serial no. 323]
Altri autori (Persone)	Van BurenMartin <1782-1862.>
Soggetti	Blockade Courts-martial and courts of inquiry Diplomacy International law International relations Neutrality Customs administration Ports of entry Seizure of vessels and cargoes Warships Legislative materials.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Batch processed record: Metadata reviewed, not verified. Some fields updated by batch processes. FDLP item number not assigned.

3. Record Nr.	UNINA9910830053603321
Titolo	Modeling, performance analysis and control of robot manipulators [[electronic resource] /] / edited by Etienne Dombre, Wisama Khalil
Pubbl/distr/stampa	London ; ; Newport Beach, CA, : ISTE, c2007
ISBN	1-280-84763-8 9786610847631 0-470-61228-2 0-470-39449-8 1-84704-560-X
Descrizione fisica	1 online resource (414 p.)
Collana	Control systems, robotics and manufacturing series
Altri autori (Persone)	DombreE (Etienne) KhalilW (Wisama)
Disciplina	629.8/933 629.892 629.8933
Soggetti	Robotics Manipulators (Mechanism)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Modeling, Performance Analysis and Control of Robot Manipulators; Table of Contents; Chapter 1. Modeling and Identification of Serial Robots; 1.1. Introduction; 1.2. Geometric modeling; 1.2.1. Geometric description; 1.2.2. Direct geometric model; 1.2.3. Inverse geometric model; 1.2.3.1. Stating the problem; 1.2.3.2. Principle of Paul's method; 1.3. Kinematic modeling; 1.3.1. Direct kinematic model; 1.3.1.1 Calculation of the Jacobian matrix by derivation of the DGM; 1.3.1.2. Kinematic Jacobian matrix; 1.3.1.3. Decomposition of the kinematic Jacobian matrix into three matrices 1.3.1.4. Dimension of the operational space of a robot1.3.2. Inverse kinematic model; 1.3.2.1. General form of the kinematic model; 1.3.2.2. Inverse kinematic model for the regular case; 1.3.2.3. Solution at the proximity of singular positions; 1.3.2.4. Inverse kinematic model of redundant robots; 1.4. Calibration of geometric parameters; 1.4.1. Introduction; 1.4.2. Geometric parameters; 1.4.2.1. Geometric

parameters of the robot; 1.4.2.2. Parameters of the robot's location; 1.4.2.3. Geometric parameters of the end-effector; 1.4.3. Generalized differential model of a robot 1.4.4. Principle of geometric calibration 1.4.4.1. General form of the calibration model; 1.4.4.2. Identifying the geometric parameters; 1.4.4.3. Solving the identification equations; 1.4.5. Calibration methods of geometric parameters; 1.4.5.1. Calibration model by measuring the end-effector location; 1.4.5.2. Autonomous calibration models; 1.4.6. Correction of geometric parameters; 1.5. Dynamic modeling; 1.5.1. Lagrange formalism; 1.5.1.1. General form of dynamic equations; 1.5.1.2. Calculation of energy; 1.5.1.3. Properties of the dynamic mode; 1.5.1.4. Taking into consideration the friction 1.5.1.5. Taking into account the inertia of the actuator's rotor 1.5.1.6. Taking into consideration the forces and moments exerted by the end-effector on its environment; 1.5.2. Newton-Euler formalism; 1.5.2.1. Newton-Euler equations linear in the inertial parameters; 1.5.2.2. Practical form of Newton-Euler equations; 1.5.3. Determining the base inertial parameters; 1.6. Identification of dynamic parameters; 1.6.1. Introduction; 1.6.2. Identification principle of dynamic parameters; 1.6.2.1. Solving method; 1.6.2.2. Identifiable parameters; 1.6.2.3. Choice of identification trajectories 1.6.2.4. Evaluation of joint coordinates 1.6.2.5. Evaluation of joint torques; 1.6.3. Identification model using the dynamic model; 1.6.4. Sequential formulation of the dynamic model; 1.6.5. Practical considerations; 1.7. Conclusion; 1.8. Bibliography; Chapter 2. Modeling of Parallel Robots; 2.1. Introduction; 2.1.1. Characteristics of classic robots; 2.1.2. Other types of robot structure; 2.1.3. General advantages and disadvantages; 2.1.4. Present day uses; 2.1.4.1. Simulators and space applications; 2.1.4.2. Industrial applications; 2.1.4.3. Medical applications; 2.1.4.4. Precise positioning 2.2. Machine types

Sommario/riassunto

This book presents the most recent research results on modeling and control of robot manipulators. Chapter 1 gives unified tools to derive direct and inverse geometric, kinematic and dynamic models of serial robots and addresses the issue of identification of the geometric and dynamic parameters of these models. Chapter 2 describes the main features of serial robots, the different architectures and the methods used to obtain direct and inverse geometric, kinematic and dynamic models, paying special attention to singularity analysis. Chapter 3 introduces global