

1. Record Nr.	UNINA9910459199003321
Titolo	Putting folklore to use / / Michael Owen Jones, editor
Pubbl/distr/stampa	Lexington, Kentucky : , : The University Press of Kentucky, , 1994 ©1994
ISBN	0-8131-3193-6 1-322-59550-X 0-8131-4770-0
Descrizione fisica	1 online resource (277 p.)
Collana	Publication of the American Folklore Society. New series
Disciplina	398/.0973
Soggetti	Applied folklore - United States Folklore - United States - Research Electronic books. United States Social life and customs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover; Title; Copyright; Contents; Preface; Applying Folklore Studies: An Introduction; Part I. Promoting Learning, Problem Solving, and Cultural Conservation; 1. How Can Acting Like a Fieldworker Enrich Pluralistic Education?; 2. Folklore in Museums: Issues and Applications; 3. Aiding the Homeless: The Use of Narratives in Diagnosis and Intervention; 4. Folklife, Cultural Conservation, and Environmental Planning; Part II. Improving the Quality of Life; 5. Folklore and Medicine; 6. Democratizing Art Therapy; 7. Designing Public Spaces for People's Symbolic Uses 8. A Folklorist's Approach to Organizational Behavior (OB) and Organization Development (OD) 9. Moving Toward Responsible Tourism: A Role for Folklore; Part III. Enhancing Identity and Community; 10. Serving the Public: An Assessment of Work in Public Sector Folklore; 11. Promoting Self-Worth among the Aging; 12. Reflecting and Creating an Occupation's Image; 13. Helping Craftsmen and Communities Survive: Folklore and Economic Development; About the Authors; Index; A; B; C; D; E; F; G; H; I; J; K; L; M; N; O; P; Q; R; S; T; U; V; W; Y; Z

**Sommario/riassunto**

<P>Essays by thirteen folklorists explore applications in such areas as museums, aiding the homeless, environmental planning, art therapy, designing public spaces, organizing development, tourism, the public sector, aging, and creating an occupation's image."</P>

**2. Record Nr.**

UNINA9910830011803321

**Titolo**

Bipedal robots : modeling, design and walking synthesis / / edited by Christine Chevallereau (and three others)

**Pubbl/distr/stampa**London, England ; ; Hoboken, New Jersey : , : ISTE : , : Wiley, , 2009  
©2007**ISBN**1-118-62297-9  
1-282-16537-2  
9786612165375  
0-470-61162-6  
0-470-39426-9**Descrizione fisica**

1 online resource (338 p.)

**Collana**

Control systems, robotics and manufacturing series. ; ; v.78

**Disciplina**629.8/932  
629.892**Soggetti**

Robots - Motion

**Lingua di pubblicazione**

Inglese

**Formato**

Materiale a stampa

**Livello bibliografico**

Monografia

**Note generali**

"First published in France in 2007 by Hermes Science/Lavoisier entitled 'Robots marcheurs bipedes : modelisation, conception, synthese de la marche'" --T.p. verso.

**Nota di bibliografia**

Includes bibliographical references and index.

**Nota di contenuto**

Bipedal Robots: Modeling, Design and Walking Synthesis; Table of Contents; Chapter 1. Bipedal Robots and Walking; 1.1. Introduction; 1.2. Biomechanical approach; 1.2.1. Biomechanical system: a source of inspiration; 1.2.2. Skeletal structure and musculature; 1.3. Human walking; 1.3.1. Architecture; 1.3.2. Walking and running trajectory data; 1.3.3. Study cases; 1.4. Bipedal walking robots: state of the art; 1.4.1. A brief history; 1.4.2. Japanese studies and creations; 1.4.3. The situation in France; 1.4.4. General evolution tendencies; 1.5. Different applications; 1.5.1. Service robotics

1.5.2. Robotics and dangerous terrains 1.5.3. Toy robots and computer animation in cinema; 1.5.4. Defense robotics; 1.5.5. Medical prostheses; 1.5.6. Surveillance robots; 1.6. Conclusion; 1.7. Bibliography; Chapter 2. Kinematic and Dynamic Models for Walking; 2.1. Introduction; 2.2. The kinematics of walking; 2.2.1. DoF of the locomotion system; 2.2.2. Walking patterns; 2.2.3. Generalized coordinates for a sagittal step; 2.2.4. Generalized coordinates for three-dimensional walking; 2.2.5. Transition conditions; 2.3. The dynamics of walking; 2.3.1. Lagrangian dynamic model; 2.3.2. Newton-Euler's dynamic model; 2.3.3. Impact model; 2.4. Dynamic constraints; 2.4.1. CoP and equilibrium constraints; 2.4.2. Non-sliding constraints; 2.5. Complementary feasibility constraints; 2.5.1. Respecting the technological limitations; 2.5.2. Non-collision constraints; 2.6. Conclusion; 2.7. Bibliography; Chapter 3. Design Tools for Making Bipedal Robots; 3.1. Introduction; 3.2. Study of influence of robot body masses; 3.2.1. Case 1: the three-link robot; 3.2.2. Case 2: the five-link robot; 3.3. Mechanical design: the architectures carried out; 3.3.1. The structure of planar robots; 3.3.2. 3D robot structures; 3.3.3. Technology of inter-body joints; 3.3.4. Drive technology; 3.4. Actuators; 3.4.1. Actuator types; 3.4.2. Characteristics of electric actuators; 3.4.3. Elements of choice for robotic actuators; 3.4.4. Comparing actuator performances; 3.4.5. Performances of transmission-actuator associations; 3.5. Sensors; 3.5.1. Measuring; 3.5.2. Frequently used sensors; 3.5.3. Characteristics and integration; 3.5.4. Sensors of inertial localization; 3.6. Conclusion; 3.7. Appendix; 3.7.1. Geometric model; 3.7.2. Dynamic model; 3.8. Bibliography; Chapter 4. Walking Pattern Generators; 4.1. Introduction; 4.2. Passive and quasi-passive dynamic walking; 4.2.1. Passive walking; 4.2.2. Quasi-passive dynamic walking; 4.3. Static balance walking; 4.4. Dynamic synthesis of walking; 4.4.1. Performance criteria for walking synthesis; 4.4.2. Formalizing the problem of dynamic optimization; 4.5. Walking synthesis via parametric optimization; 4.5.1. Approximating the control variables; 4.5.2. Parameterizing the configuration variables; 4.5.3. Parameterizing the Lagrange multipliers; 4.5.4. Formulation of the parametric optimization problem; 4.5.5. A parametric optimization example.

---

## Sommario/riassunto

This book presents various techniques to carry out the gait modeling, the gait patterns synthesis, and the control of biped robots. Some general information on the human walking, a presentation of the current experimental biped robots, and the application of walking bipeds are given. The modeling is based on the decomposition on a walking step into different sub-phases depending on the way each foot stands into contact on the ground. The robot design is dealt with according to the mass repartition and the choice of the actuators. Different ways to generate walking patterns are considered, such

---