1. Record Nr. UNINA9910554262603321

Autore	Egerstedt Magnus
Titolo	Robot ecology : constraint-based design for long-duration autonomy / / Magnus Egerstedt
Pubbl/distr/stampa	Princeton ; ; Oxford : , : Princeton University Press, , [2021] ©2021
ISBN	0-691-23007-2
Descrizione fisica	1 online resource (360 p.) : 101 b/w illus. 2 tables
Disciplina	629.892
Soggetti	Robots - Environmental aspects Autonomous robots - Design and construction Robotics - Environmental aspects
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	A revolutionary new framework that draws on insights from ecology for the design and analysis of long-duration robotsRobots are increasingly leaving the confines of laboratories, warehouses, and manufacturing facilities, venturing into agriculture and other settings where they must operate in uncertain conditions over long timescales. This multidisciplinary book draws on the principles of ecology to show how robots can take full advantage of the environments they inhabit, including as sources of energy.Magnus Egerstedt introduces a revolutionary new design paradigm—robot ecology—that makes it possible to achieve long-duration autonomy while avoiding catastrophic failures. Central to ecology is the idea that the richness of an organism’s behavior is a function of the environmental constraints imposed by its habitat. Moving beyond traditional strategies that focus on optimal policies for making robots achieve targeted tasks, Egerstedt explores how to use survivability constraints to produce both effective and provably safe robot behaviors. He blends discussions of ecological principles with the development of control barrier functions as a formal approach to constraint-based control design, and provides an in-depth look at the design of the SlothBot, a slow and energy-efficient robot

	used for environmental monitoring and conservation.Visionary in scope, Robot Ecology presents a comprehensive and unified methodology for designing robots that can function over long durations in diverse natural environments.

2.

Record Nr.	UNIORUON00449279
Autore	VAN DOREN, Mark
Titolo	The private reader : selected articles & reviews / Mark Van Doren
Pubbl/distr/stampa	XVI, 416 p. ; 24 cm
Edizione	[New York : Kraus Reprint Co.]
Descrizione fisica	Ed. orig.: New York : H. Holt, 1942.
Disciplina	804
Soggetti	Cinematografo - Critica LIBRI - Recensioni
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia