

1. Record Nr.	UNINA9910586680903321
Titolo	Collaborative and humanoid robots / / edited by Jesus Hamilton Ortiz, Ramana Vinjamuri
Pubbl/distr/stampa	London, England : , : IntechOpen, , [2021] ©2021
ISBN	1-83968-740-1
Descrizione fisica	1 online resource (182 pages) : illustrations
Disciplina	629.892
Soggetti	Androids Human-robot interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.

2. Record Nr.	UNINA9910828746503321
Autore	Santos Hector J. de los
Titolo	Understanding communications systems principles : a tutorial approach // Hector J. De Los Santos
Pubbl/distr/stampa	Denmark : , : River Publishers, , [2021] ©2021
ISBN	1-00-333992-1 1-003-33992-1 1-000-79424-5 1-5231-4441-6 87-7022-374-2
Edizione	[1st ed.]
Descrizione fisica	1 online resource (312 pages)
Collana	River Publishers series in communications
Disciplina	621.382
Soggetti	Telecommunication systems Wireless communication systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface -- Acknowledgements -- List of Figures -- List of Tables -- List of Abbreviations -- 1 Introduction to Wireless Communications and Sensing Systems -- 2 Wireless Systems Building Blocks -- 3 Communication Systems Performance Parameters -- 4 Circuit Topologies for Signal Modulation and Detection -- 5 Transmitter and Receiver Architectures -- 6 5G -- 7 MIMO 8 -- Aerospace/Electronic Warfare RADAR -- 9 Tutorials -- Bibliography -- Index -- About the Author.
Sommario/riassunto	Wireless communications and sensing systems are nowadays ubiquitous; cell phones and automotive radars typifying two of the most familiar examples. This book introduces the field by addressing its fundamental principles, proceeding from its very beginnings, up to today's emerging technologies related to the fifth-generation wireless systems (5G), Multi-Input Multiple Output (MIMO) connectivity, and Aerospace/Electronic Warfare Radar. The tone is tutorial. Problems are included at the end of each chapter to facilitate the understanding and assimilation of the material to electrical engineering

undergraduate/graduate students and beginning and non-specialist professionals. Free temporary access to Keysight's SystemVue system simulation is provided to further enhance reader learning through hands-on tutorial exercises. Chapter 1 introduces wireless communications and sensing and in particular how curiosity-driven scientific research led to the foundation of the field. Chapter 2 presents a brief introduction to the building blocks that make up wireless systems. Chapter 3 focuses on developing an understanding of the performance parameters that characterize a wireless system. Chapter 4 deals with circuit topologies for modulation and detection. In chapter 5 we cover the fundamental transmitter and receiver systems architectures that enable the transmission of information at precise frequencies and their reception from among a rather large multitude of other signals present in space. Chapter 6 introduces 5G, its motivation, and its development and adoption challenges for providing unprecedented levels of highest speed wireless connectivity. Chapter 7 takes on the topic of MIMO, its justification and its various architectures. Chapter 8 addresses the topic of aerospace/electronic warfare radar and finally Chapter 9 presents three Tutorials utilizing the SystemVue simulation tool.

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