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Sommario/riassunto

From stars to terrestrial networks and satellites From outdoors to indoors From ancient to future applications From techniques to technologies . . . The field of radionavigation signals and systems has seen significant growth in recent years. Satellite systems are very efficient, but owing to their limited exposure and/or availability in some environments, they do not cover the whole spectrum of

applications. Thus, many other positioning techniques are being developed. Now, Global Positioning presents an overview of the strengths and weaknesses of various systems with a specific emphasis on those that are satellite-based. Beginning with a description of the evolution of positioning systems, the book provides detailed coverage of the three main Global Navigation Satellite System (GNSS) constellations, discusses how to cope with indoor positioning, defines development activities and commercial positioning, and proposes a vision for the future of the field. Special features of the book include: . Exercises to test and challenge the reader's understanding . Direct comparison between constellations and other positioning systems . Mathematical content kept to a minimum in order to maximize accessibility and readability . Descriptions of European and U.S. discussions for Galileo . Historical aspects and links between the distant past and current systems . Footnotes that provide hints and comments to the reader At a time when the positioning domain is experiencing such immense transformation, it is vital to have a solid understanding of the fundamental principles, current technologies, and future improvements that will help estimate the performance and limitations of existing systems. Global Positioning fills an important need for professionals and students in a variety of fields who want a complete and authoritative overview of global positioning techniques.
