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Sommario/riassunto

The essential guide to state-of-the art mobile positioning and tracking techniques - fully updated for new and emerging trends in the field Mobile Positioning and Tracking: From Conventional to Cooperative Techniques, Second Edition explores state-of-the-art mobile positioning solutions applied on top of current wireless communication networks. Application areas covered include positioning, data fusion and filtering, tracking, error mitigation, both conventional and cooperative positioning technologies and systems, and more. The authors fill the gap between positioning and communication systems, showing how features of wireless communications systems can be used for positioning purposes and how the retrieved location information can be used to enhance the performance of wireless networks. Unlike other books on the subject, Mobile Positioning and Tracking: From Conventional to Cooperative Techniques, Second Edition covers the entire positioning and tracking value chain, starting from the measurement of positioning signals, and offering valuable insights into the theoretical fundamentals behind these methods and how they relate to application areas such as location-based services, as well as related disciplines and professional concerns, including global business considerations and the changing laws and standards governing wireless communication networks. Fully updated and revised for the latest developments in the field, this Second Edition: . Features new chapters on UWB positioning and tracking, indoor positioning in WLAN, and multi-tag positioning in RFID. Explores an array of positioning and tracking systems based on satellite and terrestrial systems technologies and methods. Introduces advanced and novel topics such as localisation in heterogeneous and cooperative scenarios. Provides a bridge between research and industry with potential implementations of the solutions presented Mobile positioning and tracking is subject to continuous innovations and improvements. This important working resource helps busy industry professionals and practitioners - including software and service developers - stay on top of emerging trends in the field. It is also a valuable reference for advanced students in related disciplines studying positioning and mobile technologies.