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Titolo	Spectrum-Aware Mobile Computing : Convergence of Cloud Computing and Cognitive Networking / / by Seyed Eman Mahmoodi, Koduvayur Subbalakshmi, R. N. Uma
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Sommario/riassunto	This book presents solutions to the problems arising in two trends in mobile computing and their intersection: increased mobile traffic driven mainly by sophisticated smart phone applications; and the issue of user demand for lighter phones, which cause more battery power constrained handhelds to offload computations to resource intensive clouds (the second trend exacerbating the bandwidth crunch often

experienced over wireless networks). The authors posit a new solution called spectrum aware cognitive mobile computing, which uses dynamic spectrum access and management concepts from wireless networking to offer overall optimized computation offloading and scheduling solutions that achieve optimal trade-offs between the mobile device and wireless resources. They show how in order to allow these competing goals to meet in the middle, and to meet the promise of 5G mobile computing, it is essential to consider mobile offloading holistically, from end to end and use the power of multi-radio access technologies that have been recently developed. Technologies covered in this book have applications to mobile computing, edge computing, fog computing, vehicular communications, mobile healthcare, mobile application developments such as augmented reality, and virtual reality. Gives readers valuable insights into the future of mobile computing and communication; Touches on wireless technologies such as 5G, mobile edge computing (MEC), mobile cloud services, and cognition-based networking; Provides examples throughout the book to provide insight into real world scenarios.