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Nota di contenuto	Frontmatter -- Contents -- Tables -- Figures -- Acknowledgments -- Chapter One. Introduction -- PART I. World Wide Web -- Chapter Two. PageRank -- Chapter Three. The Second Eigenvalue of the Google Matrix -- Chapter Four. The Condition Number of the PageRank Problem -- Chapter Five. Extrapolation Algorithms -- Chapter Six. Adaptive PageRank -- Chapter Seven. BlockRank -- PART II. P2P Networks -- Chapter Eight. Query-Cycle Simulator -- Chapter Nine. Eigen Trust -- Chapter Ten. Adaptive P2P Topologies -- Chapter Eleven. Conclusion -- Bibliography
Sommario/riassunto	This book lays out the theoretical groundwork for personalized search and reputation management, both on the Web and in peer-to-peer and social networks. Representing much of the foundational research in this field, the book develops scalable algorithms that exploit the graphlike properties underlying personalized search and reputation management, and delves into realistic scenarios regarding Web-scale data. Sep Kamvar focuses on eigenvector-based techniques in Web search,

introducing a personalized variant of Google's PageRank algorithm, and he outlines algorithms--such as the now-famous quadratic extrapolation technique--that speed up computation, making personalized PageRank feasible. Kamvar suggests that Power Method-related techniques ultimately should be the basis for improving the PageRank algorithm, and he presents algorithms that exploit the convergence behavior of individual components of the PageRank vector. Kamvar then extends the ideas of reputation management and personalized search to distributed networks like peer-to-peer and social networks. He highlights locality and computational considerations related to the structure of the network, and considers such unique issues as malicious peers. He describes the EigenTrust algorithm and applies various PageRank concepts to P2P settings. Discussion chapters summarizing results conclude the book's two main sections. Clear and thorough, this book provides an authoritative look at central innovations in search for all of those interested in the subject.