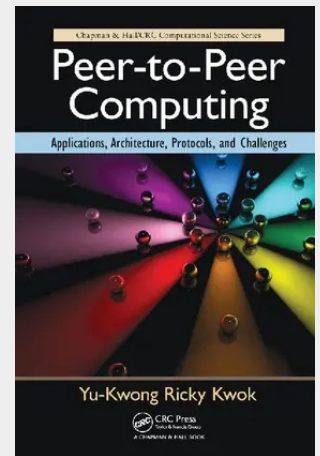


Peer-to-Peer Computing

Applications, Architecture, Protocols, and Challenges

While people are now using peer-to-peer (P2P) applications for various processes, such as file sharing and video streaming, many research and engineering issues still need to be tackled in order to further advance P2P technologies. Peer-to-Peer Computing: Applications, Architecture, Protocols, and Challenges provides comprehensive theoretical and practical coverage of the major features of contemporary P2P systems and examines the obstacles to further success. Setting the stage for understanding important research issues in P2P systems, the book first introduces various P2P network architectures. It then details the topology control research problem as well as existing technologies for handling topology control issues. The author describes novel and interesting incentive schemes for enticing peers to cooperate and explores recent innovations on trust issues. He also examines security problems in a P2P network. The final chapter addresses the future of the field. Throughout the text, the highly popular P2P IPTV application, PPLive, is used as a case study to illustrate the practical aspects of the concepts covered. Addressing the unique challenges of P2P systems, this book presents practical applications of recent theoretical results in P2P computing. It also stimulates further research on critical issues, including performance and security problems.

While people are now using P2P applications for processes, such as file sharing, many research and engineering issues still need to be tackled in order to further advance P2P technologies. This book discusses problems arising from the different aspects of P2P computing and offers potential solutions. It covers theoretical and practical aspects of key P2P components, such as architecture, peer selection, and topology control. The author emphasizes incentives as the most fundamental component in a P2P system and proposes important research and development directions for even more successful P2P applications.



132,30 €

132,30 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781439809341
Medium: Buch
ISBN: 978-1-4398-0934-1
Verlag: CRC Press
Erscheinungstermin: 17.08.2011
Sprache(n): Englisch
Auflage: 1. Auflage 2011
Serie: Chapman & Hall/CRC
 Computational Science
Produktform: Gebunden
Gewicht: 496 g
Seiten: 216
Format (B x H): 161 x 240 mm

