Next Generation Data Communication Technologies: Emerging Trends

Debashis Saha (Indian Institute of Management Calcutta, India) and Varadharajan Sridhar (Sasken Communication Technologies)

Data sharing is central to the existence of any computer network. Research on the types of networks used to transmit data, as well as the nature of the data itself, is essential for computer engineers and information technology professionals.

Next Generation Data Communication Technologies: Emerging Trends contains case studies, theories, and empirical research aimed to assist individuals and organizations in understanding the critical concepts of data networking and communications. The transmission of different types of media, along with resulting business implications, is studied in depth and applications for service providers are policymakers are offered in this rigorously researched collection.

Topics Covered:
- Authentication Protocols
- Cross-Layer Design
- Mobile Ad Hoc Networks
- Mobile Content Delivery
- Next Generation Networks
- Optimization in 4G Networks
- Process Scheduling
- Scalable Video Streaming
- Trust Based Authentication
- Vehicular Ad Hoc Networks


Print: US $190.00  |  Perpetual: US $285.00  |  Print + Perpetual: US $380.00

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Debashis Saha is currently a full professor with the MIS Group, Indian Institute of Management (IIM)-Calcutta (Kolkata, India). Previously, he was with CSE Department at Jadavpur University (Kolkata, India). He received his BE (Hons) degree from Jadavpur University (Kolkata, India), and the MTech and PhD degrees from the Indian Institute of Technology (IIT)-Kharagpur (India), all in electronics and telecommunications engineering. His research interests include pervasive communication and computing, network operations, management and security, wireless networking and mobile computing, ICT for development, and network economics. He has supervised thirteen doctoral theses, published about 250 research papers in various conferences and journals, and directed four funded research projects on networking. He is a member of the organizing/program committee of several international conferences, and is a regular reviewer of several international journals. He has co-authored several book chapters, a monograph, and five books including Networking Infrastructure for Pervasive Computing: Enabling Technologies and Systems (Norwell, MA: Kluwer, 2002) and Location Management and Routing in Mobile Wireless Networks (Boston, MA: Artech House, 2003). Dr. Saha is the recipient of the prestigious career award for Young Teachers from AICTE, Government of India, and is a SERC Visiting Fellow with the Department of Science and Technology (DST), Government of India. He is a Fellow of West Bengal Academy of Science and Technology (WAST), Senior Life Member of Computer Society of India, Senior Member of IEEE, member of ACM, member of AIS, and member of the International Federation of Information Processing Working Group's 6.8 and 6.10. He was the founding Chair of Calcutta Chapter of IEEE Communications Society (2003-2008) which won the ‘Best Chapter of the World’ award in 2008.