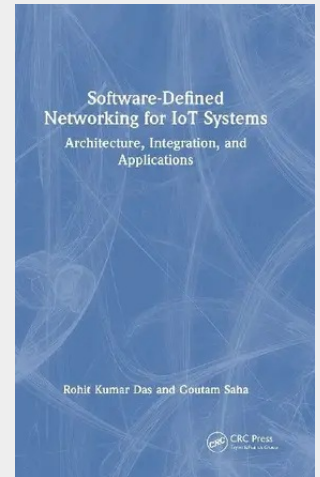


## Software-Defined Networking for IoT Systems

Architecture, Integration, and Applications

Software-Defined Networking for IoT Systems: Architecture, Integration, and Applications is a cutting-edge guide that bridges the gap between Software-Defined Networking (SDN) and the Internet of Things (IoT). As IoT networks continue to expand, they face critical challenges such as limited scalability, rigid architectures, and vulnerability to faults. This book presents SDNs as a gamechanging solution, offering centralized control, dynamic resource management, and enhanced flexibility to overcome these limitations. This comprehensive volume not only introduces the foundational concepts of SDN and IoT but also provides a deep dive into their integration. Readers will explore layer-wise architectural improvements, step-by-step implementation strategies, and real-world applications across domains like smart cities, industrial automation, healthcare, and smart grids. The book also includes detailed system models, illustrative diagrams, and practical use cases to support hands-on learning and experimentation. Key Features: - Thorough exploration of SDN and IoT integration techniques and enhanced SDN-based IoT architecture tailored for diverse sectors - Replete with real-world case studies and system-level illustrations in areas such as smart cities, healthcare, logistics, energy management, and industrial automation - Suitable as a reference or a supplementary book for researchers, advanced undergraduate and postgraduate students, as well as professionals seeking to upskill. To fully benefit from this book, readers should have a foundational understanding of computer networks (OSI model, IP addressing, TCP/IP protocols), programming languages, basic IoT concepts (architecture, protocols, data transmission). Some familiarity with simulation tools and SDN controllers is a plus.

Software-Defined Networking for IoT Systems: Architecture, Integration, and Applications is a cutting-edge guide that bridges the gap between Software-Defined Networking (SDN) and the Internet of Things (IoT). As IoT networks continue to expand, they face critical challenges such as limited scalability, rigid architectures, and vulnerability to faults. This book presents SDNs as a gamechanging solution, offering centralized control, dynamic resource management, and enhanced flexibility to overcome these limitations. This comprehensive volume not only introduces the foundational concepts of SDN and IoT but also provides a deep dive into their integration. Readers will explore layer-wise architectural improvements, step-by-step implementation strategies, and real-world applications across domains like smart cities, industrial automation, healthcare, and smart grids. The book also includes detailed system models, illustrative diagrams, and practical use cases to support hands-on learning and experimentation. Key Features: - Thorough exploration of SDN and IoT integration techniques and enhanced SDN-based IoT architecture tailored for diverse sectors - Replete with real-world case studies and system-level illustrations in areas such as smart cities, healthcare, logistics, energy management, and industrial automation - Suitable as a reference or a supplementary book for researchers, advanced undergraduate and postgraduate students, as well as professionals seeking to upskill. To fully benefit from this book, readers should have a foundational understanding of computer networks (OSI model, IP addressing, TCP/IP protocols), programming languages, basic IoT concepts (architecture, protocols, data transmission). Some familiarity with simulation tools and SDN controllers is a plus.



**209,50 €**

209,50 € (zzgl. MwSt.)

*vorbestellbar, Erscheinungstermin ca. Juni 2026*

**Artikelnummer:** 9781041193500

**Medium:** Buch

**ISBN:** 978-1-041-19350-0

**Verlag:** Taylor & Francis Ltd

**Erscheinungstermin:** 05.06.2026

**Sprache(n):** Englisch

**Auflage:** 1. Auflage 2026

**Produktform:** Gebunden

**Gewicht:** 540 g

**Seiten:** 206

**Format (B x H):** 156 x 234 mm

