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	Sommario/riassunto	This book explores the most recent Edge and Distributed Cloud computing research and industrial advances, settling the basis for Advanced Swarm Computing developments. It features the Swarm computing concepts and realizes it as an Ad-hoc Edge Cloud architecture. Unlike current techniques in Edge and Cloud computing that solely view IoT connected devices as sources of data, Swarm

computing aims at using the compute capabilities of IoT connected devices in coordination with current Edge and Cloud computing innovations. In addition to being more widely available, IoT-connected devices are also quickly becoming more sophisticated in terms of their ability to carry considerable compute and storage resources. Swarm computing and Ad-hoc Edge Cloud take full advantage of this trend to create on-demand, autonomic and decentralized self-managed computing infrastructures. Focusing on cognitive resource and service management, the book examines the specific research challenges of the Swarm computing approach, related to the characteristics of IoT connected devices that form the infrastructure. It also offers academics and practitioners insights for future research in the fields of Edge and Swarm computing.