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Sommario/riassunto	Advanced intelligent (ADI) control through Versatile Intelligent Portable (VIP) Platforms is a rapidly developing, complex, challenging field with great practical importance and potential. ADI control is an interdisciplinary field which combines and extends theories and methods from control theory, computer science, and operations research areas with the aim of developing controllers that are highly adaptable to significant unanticipated changes. Deep research and communicating new trends in the design, control, and applications of the real time control of intelligent sensors systems using advanced intelligent control methods and techniques is the main purpose of this book. Innovative multi-sensor fusion techniques, integrated through VIP platforms, are developed and combined with computer vision, virtual and augmented reality (VR&AR), and intelligent communication, including remote control, adaptive sensor networks, human-robot (H2R) interaction systems, and machine-to-machine (M2M) interfaces. Intelligent decision support systems (IDSS), including remote sensing, and their integration with DSS, GA-based DSS, fuzzy sets DSS, rough set-based DSS, intelligent agent-assisted DSS, process mining integration into decision support, adaptive DSS, computer vision-based DSS, and sensory and robotic DSS are highlighted in the field of advanced intelligent control. Approaching new technologies using advanced intelligent control through versatile intelligent portable

platforms involves complex multidisciplinary research covering enhanced IoT technologies and applications in the 5G densification era, bio-inspired techniques in future manufacturing enterprise control, cyberphysical systems approach to cognitive enterprise, developing the IT Industry 4.0 concept, industrial systems in the digital age, cloud computing, robotics, and automation with applications such as human aid mechatronics moving in unstructured and uneven environments, rescue robots, firefighting robots, rehabilitation robots, robot-assisted surgery, and domestic robots.