Record Nr. UNISA996558569003316 Autore Yu Jiadi Titolo WiFi signal-based user authentication [[electronic resource] /] / by Jiadi Yu, Hao Kong, Linghe Kong Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa 981-9959-14-4 **ISBN** Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (105 pages) Collana SpringerBriefs in Computer Science, , 2191-5776 Disciplina 005.8 Mobile computing Soggetti Computer networks - Security measures Computers, Special purpose Mobile Computing Mobile and Network Security Special Purpose and Application-Based Systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Chapter 1. Overview -- Chapter 2. Finger Gesture-based Continuous Nota di contenuto User Authentication -- Chapter 3. Gesture-Independent User Authentication Using WiFi -- Chapter 4. Multi-User Authentication Using WiFi -- Chapter 5. State-of-Art Researches -- Chapter 6. Summary. Sommario/riassunto As a privacy-preserving and illumination-robust manner, WiFi signalbased user authentication has become a new direction for ubiquitous user authentication to protect user privacy and security. It gradually turns into an important option for addressing the security concern of IoT environment. However, due to the limited sensing capability of WiFi signals and wide application scenarios, WiFi signal-based user authentication suffers from practical issues of diversified behaviors and complex scenarios. Therefore, it is necessary to address the issues and build integrated systems for user authentication using WiFi signals. In this book, the development and progress of WiFi signal-based user authentication systems in extensive scenarios are presented, which

provides a new direction and solution for ubiquitous security and

privacy protection. This book gives strong motivation of leveraging WiFi

signals to sense human activities for user authentication, and presents the key issues of WiFi-based user authentication in diversified behaviors and complex scenarios. This book provides the approaches for digging WiFi signals to sense human activities and extract features, realizing user authentication under fine-grained finger gestures, undefined body gestures, and multi-user scenarios. State-of-the-art researches and future directions involved with WiFi signal-based user authentication are presented and discussed as well. This book will benefit researchers and practitioners in the related field.