1. Record Nr. UNISA996393002803316 Spackman Thomas Autore A declaration of such greiuous accidents as commonly follow the biting Titolo of mad dogges, together with the cure thereof, by Thomas Spackman Doctor of Physick [[electronic resource]] London, : Printed [at Eliot's Court Press] for John Bill, 1613 Pubbl/distr/stampa [6], 72, 75-83, [1] p Descrizione fisica Soggetti Rabies Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali With a title-page woodcut. Identification of printer from STC. Running title reads: Of a madde dogges biting and the cure. Reproduction of the original in the British Library. Sommario/riassunto eebo-0018

Record Nr. UNINA9911015965703321 Autore Uddin Zia **Titolo** Trustworthy Multimodal Intelligent Systems for Independent Living // by Md Zia Uddin Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 3-031-97359-3 Edizione [1st ed. 2025.] 1 online resource (208 pages) Descrizione fisica Collana Cognitive Technologies, , 2197-6635 Disciplina 006.3 Soggetti Artificial intelligence User interfaces (Computer systems) Human-computer interaction Multiagent systems Machine learning Artificial intelligence - Data processing Artificial Intelligence User Interfaces and Human Computer Interaction Multiagent Systems Intelligence Infrastructure Machine Learning **Data Science** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Acknowledgement -- Preface -- 1. Al for Independent Living -- 2. Multimodal Systems for Independent Living -- 3. Synthetic Data -- 4. Trustworthy AI and Explainability -- 5. Case Studies: Daily Activity Monitoring -- 6. Case Studies: Health Monitoring and Analysis -- 7. Case Studies: Understanding Emotions -- 8. Real-Time Applications. Sommario/riassunto This book is an essential guide for anyone interested in how artificial intelligence can enhance the quality of life for individuals who wish to maintain autonomy in their own homes. The author begins by introducing the reader to Al applications in independent living environments, such as smart assisted homes and Al-driven

personalization, and thoughtfully explores the ethical challenges

involved. With a strong focus on the intersection of technology and human needs, the book provides a detailed roadmap for building intelligent systems that promote safety, independence, and dignity, especially for elderly or vulnerable populations. The author offers both foundational knowledge and critical discussions around the opportunities and limitations of AI when applied to daily life scenarios. A major strength of the book lies in its thorough examination of multimodal systems. Readers are introduced to a rich array of sensor technologies including wearable devices, environmental sensors. vision-based systems, and sound-based inputs. These components are described not only in terms of their individual functionalities but also in how they interact and fuse data to support complex inference tasks. The text walks the reader through system architectures—centralized and distributed—while emphasizing data fusion, synchronization, and real-time versus batch processing. Through practical examples such as fall detection alerts and activity recognition, the book highlights the engineering challenges and solutions involved in building robust, responsive, and user-accepted assistive systems. Ethical deployment, user engagement, long-term maintenance, and family involvement are all addressed in ways that reflect real-world concerns and user diversity. The book also tackles some of the most pressing topics in Al today: data privacy, explainability, and trust. With an entire section dedicated to synthetic data, it explains how artificial data can be used to train effective models while safeguarding user privacy. .