Record Nr. UNINA9910299477003321 Systems design for remote healthcare / / Koushik Maharatna, Silvio **Titolo** Bonfiglio, editors Pubbl/distr/stampa New York:,: Springer,, 2014 **ISBN** 1-4614-8842-7 Edizione [1st ed. 2014.] 1 online resource (xvii, 332 pages) : illustrations (some color) Descrizione fisica Collana Gale eBooks Disciplina 502.85 610.28 620 621.3815 Soggetti System design Medical informatics Medical records - Data processing Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto A Clinician's View of Next-Generation Remote Healthcare System --System Overview of Next-Generation Remote Healthcare -- Vital Sign Sensing Technology -- Signal Processing Architecture Implementation Methodologies for Next-Generation Remote Healthcare Systems --Machine Learning Techniques for Remote Healthcare -- Patient Health Record (PHR) System.- Wireless Sensor Networks—A Key Enabling Technology for Remote Healthcare -- System Integration Issues for Next-Generation Remote Healthcare System -- A Business Perspective -- Case Studies. Sommario/riassunto This book provides a multidisciplinary overview of the design and implementation of systems for remote patient monitoring and healthcare. Readers are guided step-by-step through the components of such a system and shown how they could be integrated in a coherent framework for deployment in practice. The authors explain planning

from subsystem design to complete integration and deployment, given

particular application constraints. Readers will benefit from descriptions of the clinical requirements underpinning the entire application scenario, physiological parameter sensing techniques,

information processing approaches and overall, application dependent system integration. Each chapter ends with a discussion of practical design challenges and two case studies are included to provide practical examples and design methods for two remote healthcare systems with different needs. Provides a multi-disciplinary overview of next-generation mobile healthcare system design;

- Includes fundamental knowledge from clinical science, computer science, electronics, and communication technology to give a complete overview of necessary steps for effective, integrated system design;
- Discusses practical requirements and illustrates system design with two case studies in remote patient monitoring.