Record Nr. UNINA9910734857803321 Autore Thanki Rohit Titolo Advanced Technologies for Industrial Applications / / by Rohit Thanki, Purva Joshi Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2023 3-031-33238-5 **ISBN** Edizione [1st ed. 2023.] 1 online resource (105 pages) Descrizione fisica Altri autori (Persone) JoshiPurva Disciplina 621.382 Soggetti Telecommunication Signal processing Industrial engineering Production engineering Communications Engineering, Networks Digital and Analog Signal Processing Industrial and Production Engineering Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction -- System Designing, Modeling and Its Applications --Signal Processing and Its Applications -- Computer Vision and Its Applications -- Artificial Intelligence and Its Applications -- Upcoming Technological Tools for Industry. -Industrial IoT (IIoT) -- Autonomous Robots -- Conclusion. Sommario/riassunto This book provides information on advanced communication technology used in Industry 4.0 and 5.0. The book covers a variety of technologies such as signal processing, system designing, computer vision, and artificial intelligence and explains their benefits, usage, and market values in Industry 4.0 and 5.0. The authors present technological tools for industrial applications and give examples of their usage of system design, modeling, artificial intelligence, Internet of Things and robotics. This book covers the impact of these technologies in various industrial applications and provides future technological tools that will be helpful in future planning and

development. The book is pertinent to researchers, academics,

professionals, planners, and student's interest in Industry 5.0. Discusses a variety of communications technologies and their application in Industry 5.0; Includes signal processing, system designing, computer vision, and artificial intelligence in relation to Industry 5.0; Provides information on various advanced technologies such as Internet of Things and robotics and discusses their usage in various industrial applications; Presents scenarios of technology usage in various settings to help with strategy, design, and analysis.