Record Nr. UNINA9910746959203321 Autore Dhanaraj Rajesh Kumar Titolo Artificial Intelligence in IoT and Cyborgization / / edited by Rajesh Kumar Dhanaraj, Bharat S. Rawal, Sathya Krishnamoorthi, Balamurugan Balusamy Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 Pubbl/distr/stampa **ISBN** 981-9943-03-5 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (191 pages) Collana Studies in Computational Intelligence, , 1860-9503;; 1103 Altri autori (Persone) RawalBharat S KrishnamoorthiSathya BalusamyBalamurugan Disciplina 629.892 Soggetti Internet of things Artificial intelligence Computational intelligence Cooperating objects (Computer systems) Internet of Things Artificial Intelligence Computational Intelligence Cyber-Physical Systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Introduction to Cyborgization systems -- AI based Smart IoT systems -- Role of Machine Learning and Deep Learning applications in the Internet of Things (IoT) Security -- IOT Based Experimental Relaying System for Smart Grid -- Environment Twin based Deep learning model using Reconfigurable Holographic Surface for user location prediction -- Surveillance of Robotic Boat Using IoT and Image Processing --Advanced Human – Computer Interaction Technology in Digital Twins -- CNN Architecture and Classification of Miosis and Mydriasis Clinical Conditions -- Role of Object Detection for Brain Tumor Identification Using Magnetic Resonance Image Scans -- Deep Learning Model for Predicting Diabetes Disease Using SVM -- Deep Learning For Targeted

Treatment. .

## Sommario/riassunto

This book introduces the concept of combining artificial intelligence (AI) and Internet of things (IoT) with real human organs to form a cybernetic organism or cyborg. It is a concept of man—machine mixture which helps in restoring or enhancing the ability of a body part by integrating some technology or artificial component with that body part. These smart artificial organs act as a substitute for real organs having various capabilities like scanning the body, detecting and transmitting the diagnostic data to machines. For example, an artificial heart is capable of monitoring the overall health of a person, and lungs can inform the doctor of abnormalities. This book benefits academic researchers and industrialist who work in the field cyborgization and loT within human bodies.