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Nota di contenuto	Decoding Human Essence Novel Machine Learning Techniques and Sensor Applications in Emotion Perception and Activity Detection -- Leveraging Context-Aware Emotion and Fatigue Recognition through Large Language Models for Enhanced Advanced Driver Assistance Systems ADAS -- ECG based Human Emotion Recognition Using Generative Models -- An evolutionary convolutional neural network architecture for recognizing emotions from EEG signals -- Analyzing the Potential Contribution of a Meta Learning Approach to Robust and Effective Subject Independent Emotion related Time Series Analysis of Bio signals -- A Multibranch LSTM CNN Model for Human Activity Recognition -- Importance of Activity and Emotion Detection in the

field of Ambient Assisted Living -- Real Time Human Activity Recognition for the Elderly VR Training with Body Area Networks -- An Interactive Metamodel Integration Approach IMIA for Active and Assisted Living Systems.

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Sommario/riassunto

This book explores integrating machine learning techniques and sensor applications for human emotion and activity recognition, creating personalized and effective support systems. It covers state-of-the-art machine learning techniques and large language models using multimodal sensors. Enhancing the quality of life for individuals with special needs, particularly the elderly, is a key focus in Active and Assisted Living (AAL) research. Unlike other literature, it emphasizes support mechanisms along with recognition, using metamodel integration for adaptable AAL systems. This book offers insights into technologies transforming AAL for researchers, students, and practitioners. It is a valuable resource for developing responsive and personalized support systems that enhance life quality in smart environments. It is also essential for advancing the understanding of machine learning and sensor technologies in AAL and emotion recognition. .

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