

1. Record Nr.	UNINA9911064735103321
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Titolo	Emotion and Facial Recognition in Artificial Intelligence: Sustainable Multidisciplinary Perspectives and Applications // edited by Khadija Slimani, Vinay Aseri, Samira Khouli
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2026
ISBN	3-032-14778-6
Edizione	[1st ed. 2026.]
Descrizione fisica	1 online resource (460 pages)
Collana	Information Systems Engineering and Management, , 3004-9598 ; ; 78
Altri autori (Persone)	Slimani
Disciplina	006.3
Soggetti	Computational intelligence Computer vision Artificial intelligence Computational Intelligence Computer Vision Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to Emotion Expression and AI -- Theories of Emotions in Psychology -- Classical Face Recognition: Geometric Models, Subspace Techniques and Local Descriptors -- Integrating Acoustic Feature Extraction And LSTM Models For Emotion Classification In Speech -- Emotion Detection in Human-Machine Interaction Using ML Techniques -- Real Time: 3D Facial Expression Recognition Using Improved Alex-Net Convolutional Network via Deep-Emotion -- Feature Aggregation for Efficient Continual Learning of Complex Facial Expressions -- Advanced Techniques In Facial Landmark Detection And Feature Extraction For Emotion-Aware AI Systems -- Detection of Micro-expressions and Subtle Emotions -- Navigating the Future of Emotion AI: Technical Barriers, Ethical Concerns, and Sustainable Advancements -- Emotion AI in Mental Health -- A Conceptual Framework for Adaptive Student Assessment Using AI-Driven Recommendations and Facial Expression Recognition -- Integrating AI-Driven Facial Emotion Recognition into E-Learning Systems: Sustainable Educational Markets through Interdisciplinary Innovations -- Integrating Positive Emotions

to Support Self-Directed Learning -- Emotion AI in Business and Customer Services -- Deep Learning Approaches and Technical Challenges in Facial Emotion Recognition (FER) -- Emotion Recognition and the Law: Bridging Technology and Human Rights -- Emotion AI: Challenges and Future Directions.

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Sommario/riassunto

This book explores one of the most transformative frontiers of modern science the intersection of emotion, facial recognition, and artificial intelligence, in an age where machines are evolving from analytical processors to emotionally perceptive entities. Bringing together leading voices from AI research, psychology, neuroscience, human-computer interaction, and policy, this book delivers an in-depth examination of how intelligent systems are learning to understand, interpret, and simulate human emotions. From theoretical foundations to advanced deep learning models, readers gain a panoramic view of how emotional data can reshape education, health care, mental health diagnostics, business intelligence, governance, and law enforcement. Spanning eighteen comprehensive chapters, the book explores:

- Computational models of emotion and facial recognition using cutting-edge AI architectures.
- The role of affective computing in sustainable and ethical technology ecosystems.
- Applications of emotion AI in mental health, adaptive learning, and personalized education.
- Forensic and legal implications of emotion recognition, privacy, and data governance.
- The future of emotionally intelligent and human-centric AI systems.

Each contribution in this edited book offers a multidisciplinary and globally relevant perspective, blending empirical research with ethical reflection and sustainable design principles. A must-read for academicians, researchers, industry professionals, policy experts, and AI practitioners, this book serves as both a scholarly reference and a visionary roadmap toward emotionally aware and ethically responsible AI. As technology begins to feel, not just think, this book invites readers to explore how the fusion of emotion and intelligence can redefine the future of human-machine coexistence.

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