Record Nr. UNINA9910983479503321 Autore Gunjan Vinit Kumar Titolo Cybernetics, Human Cognition, and Machine Learning in Communicative Applications / / edited by Vinit Kumar Gunjan, Sabrina Senatore, Amit Kumar Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2025 Pubbl/distr/stampa **ISBN** 9789819785339 9819785332 Edizione [1st ed. 2025.] Descrizione fisica 1 online resource (481 pages) Collana Cognitive Science and Technology, , 2195-3996 Altri autori (Persone) SenatoreSabrina KumarAmit 006.31 Disciplina Soggetti Computational intelligence Neural networks (Computer science) Computational neuroscience Artificial intelligence Quantitative research Machine learning Computational Intelligence Mathematical Models of Cognitive Processes and Neural Networks Computational Neuroscience Artificial Intelligence Data Analysis and Big Data Machine Learning Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto 1. Introduction to Cybernetics, Cognition, and Machine Learning -- 2. Foundations of Cybernetics -- 3. Cognition and Cognitive Systems --4. Introduction to Machine Learning -- 5. Cybernetics and Machine Learning Integration. Sommario/riassunto This book presents the fascinating intersection of human cognition and artificial intelligence. Written by leading experts in the fields of

cybernetics, cognitive science, and machine learning, this book seeks to bridge the gap between these disciplines and explores the synergies

that emerge when humans and machines work together. The book examines the challenges posed by biased data, lack of transparency, and the "black box" nature of some machine learning algorithms. It proposes novel ways to address these issues and foster greater trust and accountability in AI systems. Drawing on cutting-edge research and real-world case studies, it presents a comprehensive and forward-looking perspective on the future of AI and its impact on society. In conclusion, this book offers a compelling exploration of the synergy between human cognition and machine learning, providing insights that are relevant to scholars, researchers, policymakers, and anyone interested in the transformative potential of artificial intelligence.