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Titolo	Computational Learning Theories : Models for Artificial Intelligence Promoting Learning Processes // by David C. Gibson, Dirk Ifenthaler
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ISBN	9783031658983
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Descrizione fisica	1 online resource (164 pages)
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Nota di contenuto	1. Why 'Computational' Learning Theories? -- 2. AI and Learning Processes -- 3. A Complex Hierarchical Framework of Learning -- 4. Piaget and the Ontogeny of Intelligence -- 5. Keller and the ARCS Model of Motivation -- 6. Complexity Theory and Learning -- 7. AI Roles for Enhancing Individual Learning -- 8. Informal Social Learning -- 9. How People Learn -- 10. AI Assisting Individuals as Team Members -- 11. AI Roles for the Team or Organization -- 12. A Network Theory of Culture -- 13. AI Roles in Cultural Learning -- 14. Open Questions.
Sommario/riassunto	This book shows how artificial intelligence grounded in learning theories can promote individual learning, team productivity and multidisciplinary knowledge-building. It advances the learning sciences by integrating learning theory with computational biology and complexity, offering an updated mechanism of learning, which integrates previous theories, provides a basis for scaling from individuals to societies, and unifies models of psychology, sociology and cultural studies. The book provides a road map for the development of AI that addresses the central problems of learning

theory in the age of artificial intelligence including: optimizing human-machine collaboration promoting individual learning balancing personalization with privacy dealing with biases and promoting fairness explaining decisions and recommendations to build trust and accountability continuously balancing and adapting to individual, team and organizational goals generating and generalizing knowledge across fields and domains The book will be of interest to educational professionals, researchers, and developers of educational technology that utilize artificial intelligence.

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