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Titolo	Computational Creativity Research: Towards Creative Machines // edited by Tarek R. Besold, Marco Schorlemmer, Alan Smaill
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Descrizione fisica	1 online resource (417 p.)
Collana	Atlantis Thinking Machines, , 1877-3273 ; ; 7
Disciplina	003.3 004 004.6 006.3
Soggetti	Artificial intelligence Computer simulation Special purpose computers Philosophy of mind Application software Artificial Intelligence Simulation and Modeling Special Purpose and Application-Based Systems Philosophy of Mind Computer Applications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Stakeholder Groups in Computational Creativity Research and Practice -- Weak and Strong Computational Creativity -- Theorem: General intelligence entails creativity, assuming -- The Computational Creativity Complex -- How Models of Creativity and Analogy Need to Answer the Tailorability Concern -- On the role of computers in creativity-support systems -- A computational theory of creativity as everyday reasoning from learned information -- Accounting for creativity within a psychologically realistic cognitive architecture -- E pluribus unum - Formalisation, Use-Cases, and Computational Support for Conceptual Blending -- Creating Meaningful and Poetic Instances of

Rhetorical Forms -- Open-Ended Elaborations in Creative Metaphor -- Poetry generation with PoeTryMe -- From MEXICA to MEXICA-impro: the Evolution of a Computer Model for Plot Generation -- Handle: Engineering Artificial Musical Creativity at the "Trickery" Level -- A Culinary Computational Creativity System -- Interactive Meta-Reasoning: Toward a CAD-like environment for designing game-playing agents -- Collective Discovery Events: Web-based Mathematical Problem-solving with Codelets -- A Personal Perspective Into the Future for Computational Creativity.

Sommario/riassunto

Computational Creativity, Concept Invention, and General Intelligence in their own right all are flourishing research disciplines producing surprising and captivating results that continuously influence and change our view on where the limits of intelligent machines lie, each day pushing the boundaries a bit further. By 2014, all three fields also have left their marks on everyday life – machine-composed music has been performed in concert halls, automated theorem provers are accepted tools in enterprises' R&D departments, and cognitive architectures are being integrated in pilot assistance systems for next generation airplanes. Still, although the corresponding aims and goals are clearly similar (as are the common methods and approaches), the developments in each of these areas have happened mostly individually within the respective community and without closer relationships to the goings-on in the other two disciplines. In order to overcome this gap and to provide a common platform for interaction and exchange between the different directions, the International Workshops on "Computational Creativity, Concept Invention, and General Intelligence" (C3GI) have been started. At ECAI-2012 and IJCAI-2013, the first and second edition of C3GI each gathered researchers from all three fields, presenting recent developments and results from their research and in dialogue and joint debates bridging the disciplinary boundaries. The chapters contained in this book are based on expanded versions of accepted contributions to the workshops and additional selected contributions by renowned researchers in the relevant fields. Individually, they give an account of the state-of-the-art in their respective area, discussing both, theoretical approaches as well as implemented systems. When taken together and looked at from an integrative perspective, the book in its totality offers a starting point for a (re)integration of Computational Creativity, Concept Invention, and General Intelligence, making visible common lines of work and theoretical underpinnings, and pointing at chances and opportunities arising from the interplay of the three fields.
