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Soggetti	Artificial intelligence Software engineering User interfaces (Computer systems) Artificial Intelligence Software Engineering User Interfaces and Human Computer Interaction
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Livello bibliografico	Monografia
Nota di contenuto	AGI and the Knight-Darwin Law: why idealized AGI reproduction requires collaboration -- Error-Correction for AI Safety -- Artificial Creativity Augmentation -- The hierarchical memory based on compartmental spiking neuron model -- The Dynamics of Growing Symbols: A Ludics Approach to Language Design by Autonomous Agents -- Approach for development of engineering tools based on knowledge graphs and context separation -- Towards Dynamic Process Composition in the DSO Cognitive Architecture -- SAGE: Task-Environment Platform for Evaluating a Broad Range of AI Learners -- Post-Turing Methodology: Breaking the Wall on the Way to Artificial General Intelligence -- Self-explaining AI as an alternative to interpretable AI -- AGI needs the Humanities -- A report of a recent book: "AI and Human Thought and Emotion" -- Cognitive Machinery and Behaviours -- Combinatorial Decision Dags: A Natural Computational Model for General Intelligence -- What Kind of Programming Language Best Suits Integrative AGI? -- Guiding Symbolic

Natural Language Grammar Induction via Transformer-Based Sequence Probabilities -- Embedding Vector Differences Can Be Aligned With Uncertain Intensional Logic Differences -- Delta Schema Network in Model-based Reinforcement Learning -- Information Digital Twin {Enabling Agents to Anticipate Changes in their Tasks -- 'OpenNARS for Applications': Architecture and Control -- Towards AGI Agent Safety by Iteratively Improving the Utility Function -- Learning to Model Another Agent's Beliefs: A Preliminary Approach -- An Attentional Control Mechanism for Reasoning and Learning -- Hyperdimensional Representations in Semiotic Approach to AGI -- The Conditions of Artificial General Intelligence: Logic, Autonomy, Resilience, Integrity, Morality, Emotion, Embodiment, and Embeddedness -- Position paper: The use of engineering approach in creation of artificial general intelligence -- How do you test the strength of AI? -- Omega: An Architecture for AI Unification -- Analyzing Elementary School Olympiad Math Tasks as a Benchmark for AGI -- The meaning of things as a concept in a strong AI architecture -- Toward a General Believable Model of Human-Analogous Intelligent Socially Emotional Behavior -- Autonomous Cumulative Transfer Learning -- New Brain Simulator II Open-Source Software -- Experience-specific AGI Paradigms -- Psychological portrait of a virtual agent in the Teleport game paradigm -- Logical probabilistic biologically inspired cognitive architecture -- An Architecture for Real-time Reasoning and Learning -- A Model for Artificial General Intelligence.

Sommario/riassunto

This book constitutes the refereed proceedings of the 13th International Conference on Artificial General Intelligence, AGI 2020, held in St. Petersburg, Russia, in September 2020. The 30 full papers and 8 short papers presented in this book were carefully reviewed and selected from 60 submissions. The papers cover topics such as AGI architectures, artificial creativity and AI safety, transfer learning, AI unification and benchmarks for AGI.
