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Titolo	Utilizing Problem Structure in Planning [[electronic resource]] : A Local Search Approach / / by Jörg Hoffmann
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Nota di contenuto	Planning: Motivation, Definitions, Methodology -- 1: Introduction -- 2: Planning -- A Local Search Approach -- 3: Base Architecture -- 4: Dead Ends -- 5: Goal Orderings -- 6: The AIPS-2000 Competition -- Local Search Topology -- 7: Gathering Insights -- 8: Verifying the h?+? Hypotheses -- 9: Supporting the hFF Hypotheses -- 10: Discussion -- Appendix A: Formalized Benchmark Domains -- Appendix B: Automated Instance Generation.
Sommario/riassunto	Planning is a crucial skill for any autonomous agent, be it a physically embedded agent, such as a robot, or a purely simulated software agent. For this reason, planning, as a central research area of artificial intelligence from its beginnings, has gained even more attention and importance recently. After giving a general introduction to AI planning, the book describes and carefully evaluates the algorithmic techniques used in fast-forward planning systems (FF), demonstrating their excellent performance in many wellknown benchmark domains. In advance, an original and detailed investigation identifies the main patterns of structure which cause the performance of FF, categorizing planning domains in a taxonomy of different classes with respect to their aptitude for being solved by heuristic approaches, such as FF. As shown, the majority of the planning benchmark domains lie in classes

which are easy to solve.