
Autonomous Agents



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The group performs basic and applied research in the areas of satisfiability and discrete optimisation problems by applying techniques such as constraint and Boolean satisfiability, (constraint) logic programming, and knowledge reasoning. We do research on general problem solving techniques including search and consistency algorithms (motivated by artificial intelligence), on algorithms for solving particular combinatorial optimisation problems such as scheduling, and on formal properties of problems such as problem complexity. Currently the main application areas of our research are planning and scheduling. We are working on generally applicable planning and scheduling engines, on formal specification of problems (problem modelling), and on automated extraction of knowledge from models that is useful for problem solving. Our current focus is on techniques integrating temporal, resource, and logical reasoning.