Excel International Journal of Technology, Engineering and Management
2025; Volume -12, Issue-3_Page_75-82

A Brief Review on Artificial Intelligence Acts

Dr. Shakti Pandey
Assistant professor, Department of Computer Application
J D Women's College Patna Bihar

Dr. Savya Sachi
Assistant Professor, Department of computer application, L N MISHRA INSTITUTE of Economic Development and Social Change Patna Bihar

Published online: September 2025
DOI Link: https://doi.org/10.64971/j.cph.eijtem.v12.i3.9.2025

Abstract- Research on artificial intelligence in the last two decades has greatly improved perfor- mance of both manufacturing and service systems. Currently, there is a dire need for an article that presents a holistic literature survey of worldwide, theoretical frameworks and practical experiences in the field of artificial intelligence. This paper reports the state-of-the-art on artificial intelligence in an integrated, concise, and elegantly distilled manner to show the experiences in the field. In particular, this paper provides a broad review of recent developments within the field of artificial intelligence (AI) and its applications. The work is targeted at new entrants to the artificial intelligence field.

Keywords - AI, Neural Network, Business Efficiency, Genetic Algorithms, Fuzzy Logic.

INTRODUCTION

In the 21st century artificial intelligence (AI) has become an important area of research in virtually all fields: engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market and law, among others (Halal (2003), Masnikosa (1998), Metaxiotis et al. (2003), Raynor (2000), Stefanuk and Zhozhikashvili (2002), Tay and Ho (1992) and Wongpinunwatana et al. (2000)). The field of AI has grown enormously to the extent that tracking proliferation of studies becomes a difficult task (Ambite and Knoblock (2001), Balazinski et al. (2002), Cristani (1999) and Goyache (2003)). Apart from the application of AI to the fields mentioned above, studies have been segregated into many areas with each of these springing up as individual fields of knowledge (Eiter et al. (2003), Finkelstein et al. (2003), Grunwald and Halpern (2003), Guestrin et al. (2003), Lin (2003), Stone et al. (2003) and Wilkins et al. (2003)). This work grew out of the challenges that AI possesses in view of the rise and growing nature of information technology worldwide that has characterised business- and non-business organisational development (Barzilay et al. (2002), Baxter et al. (2001), Darwiche and Marquis (2002), Gao and Culberson (2002), Tennenholtz (2002) and Wiewwiora (2003)). The necessity for research in AI is being motivated by two factors that are (i) to give the new entrants into the AI field an understanding of the basic structure of the AI literature (Brooks (2001), Gamberger and Lavrac (2002), Kim (1995), Kim and Kim (1995), Patel-Schneider and Sebastiani (2003) and Zanuttini (2003)). As such, the literature discussed here answers the common query, “why must I study AI?” (ii) the upsurge of interest in AI that has prompted an increased interest and huge investments in AI facilities. Interested researchers from all disciplines wish to be aware of the work of others in their field, and share the knowledge gleaned over the years (Rosati (1999), Kaminka et al. (2002), Bod (2002), Acid and De Campos (2003), Walsh and Wellman (2003), Kambhampati (2000) and Barber (2000)). By sharing AI knowledge, new techniques and

approaches can be developed so that a greater understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI. On a very broad account the areas of artificial intelligence are classified into sixteen categories (Becker et al. (2000), Singer et al. (2000), Chen and Van Beek (2001), Hong (2001) and Stone et al. (2001)). These are: reasoning, programming, artificial life, belief revision, data mining, distributed AI, expert systems, genetic algorithms, systems, knowledge representation, machine learning, natural language understanding, neural networks, theorem proving, constraint satisfaction, and theory of computation (Peng and Zhang (2007), Zhou et al. (2007) and Wang et al. (2007)). Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI, as presented in Figure 1. What follows is a brief discussion of some of the important areas of AI (Chan and Darwiche (2002), Pool and Zhang (2003), Bhattacharyya and Keerthi (2001), Chawla et al. (2002), Al-Ani and Deriche (2002) and Xu and Li (2000)). These descriptions only account for a selected number of areas.

LITERATURE REVIEW

The theory and practice of reasoning in artificial intelligence has extensive documentation (Atkinson and Bench-Capon (2007)). Researchers have worked in terms of: (i) development of axioms that give sound and complete axiomazation for the logic of reasoning; (ii) the theoretical properties of the algorithms used for qualitative temporal reasoning; (iii) what is relevant to a given problem of reasoning (independence); (iv) and methods for qualitative reasoning. A study on axomatising causal reasoning is credited to Halpern (2000). The author axomatised causal models defined in terms of a collection of equations as defined by Pearl. Axiomatisations are provided for three successively more general classes of causal models (i) the class of recursive theories (those without feedback); (ii) the class of theories where the solutions to the equations are unique; (iii) arbitrary theories (where the equations may not have solutions and, if they do, they are not necessarily unique). It is shown that to reason about causality in the most general third class, we must extend the language used by Galles and Pearl. In addition, the complexity of the decision procedures is characterised for all the languages and classes of models considered. The concept of reasoning in Artificial Intelligence has been discussed under some general areas, which include complexity of reasoning, reasoning about minimal belief, axiomatising, sampling algorithm, conditional plausibility, efficient methods, logic and consistency, fuzzy description logics, backbone fragility, diagnosis, independence, domain filtering, and fusion. The literature on complexity of reasoning relates to spatial congruence and expressive description logics. Cristani (1999) introduces a novel algebra for reasoning about spatial congruence, thus, showing that the satisfiability problem in the spatial algebra MC-4 is NP-complete, and present a complete classification of tractability in the algebra, based on the individuation of three maximal tractable sub classes, one containing the basic relations. The work by Tobies (2000) studies the complexity of the combination of the description logics ALCQ and ALCQI with a terminological formalism based on cardinality restrictions on concepts. These combination can naturally be embedded into C∧2, the two variable fragment of predicate logic with counting quantifiers, which yields decidability in next time. In another work, Cheng and Druzdzel (2000) develop an algorithm for evidential reasoning in large Bayesian networks. An adaptive importance sampling algorithm, AIS-BN that shows promising convergence rates even under extreme conditions is developed. It seems to outperform the existing sampling algorithm consistently. This provides a
better substitute to stochastic sampling algorithms that have been observed to perform poorly in evidential reasoning with extremely unlikely evidence.

Author Name	Year	Remarks
Baader et al.	2002	he authors extend the decidability transfer results from normal modal logics to a large class of description logics
Halpern and Pucella	2002	presents a preposi- tional logic to reason about the uncertainty of events, where the uncertainty is modeled by a set of probability measures assigning an interval of probability to each event
Wray and Laird	2003	how the combination of a hierarchy and persistent assertions of knowledge can lead to difficulty in maintaining logical consistency in asserted knowledge
Debruyne and Bessiere	2001	ocuses on the local consistencies that are stronger than arc consistency, without changing the structure of the network, i.e., only removing inconsistent values from the domains
Lang et al	2003	Two basic forms of independence, namely, a syntactic one and a semantic one are treated. They also con- sider the problem of forgetting, i.e. distilling from a knowledge base only the part that is relevant to the set of queries constructed from a subset of the alphabet
Halal	2003	In the 21st century artificial intelligence (AI) has become an important area of research in virtually all fields: engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market and law
Masnikosa	1998	In the 21st century artificial intelligence (AI) has become an important area of research in virtually all fields: engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market and law
Metaxiotis et al.	2003	In the 21st century artificial intelligence (AI) has become an important area of research in virtually all fields: engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market and law
Raynor	2000	In the 21st century artificial intelligence (AI) has become an important area of research in virtually all fields: engineering, science, education, medicine, business, accounting, finance, marketing, economics, stock market and law
Stefanuk and Zhozhikashvili	2002	The field of AI has grown enormously to the extent that tracking proliferation of studies becomes a difficult task
Tay and Ho	1992	The field of AI has grown enormously to the extent that tracking proliferation of studies becomes a difficult task

Wongpinunwatana et al.	2000	The field of AI has grown enormously to the extent that tracking proliferation of studies becomes a difficult task
Ambite and Knoblock	2001	Apart from the application of AI to the fields mentioned above, studies have been segregated into many areas with each of these springing up as individual fields of knowledge
Balazinski et al.	2002	Apart from the application of AI to the fields mentioned above, studies have been segregated into many areas with each of these springing up as individual fields of knowledge
Cristani	1999	Apart from the application of AI to the fields mentioned above, studies have been segregated into many areas with each of these springing up as individual fields of knowledge
Goyache	2003	Apart from the application of AI to the fields mentioned above, studies have been segregated into many areas with each of these springing up as individual fields of knowledge
Halpern	2000	Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI
Zhou et al	2007	Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI
Peng and Zhang	2007	Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI
Wang et al.	2007	Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI
Bhattacharyya and Keerthi	2001	Since many readers of this article may require a glance view of the AI field, the author has utilised a flow diagram to illustrate the whole structure of this paper, and the relationship among the diverse fields of AI
Kaminka et al.	2002	By sharing AI knowledge, new techniques and approaches can be developed so that a greater understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI
Eiter et al.	2003	By sharing AI knowledge, new techniques and approaches can be developed so that a greater

		understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI
Brooks	2001	By sharing AI knowledge, new techniques and approaches can be developed so that a greater understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI
Barzilay et al.	2002	By sharing AI knowledge, new techniques and approaches can be developed so that a greater understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI
Gao and Culberson	2002	By sharing AI knowledge, new techniques and approaches can be developed so that a greater understanding of the field can be gained. To these ends, this paper has also been written for researchers in AI so they can continue in their efforts aimed at developing this area of concentration through newly generated ideas. Consequently, they would be able to push forward the frontier of knowledge in AI

RESEARCH METHODOLOGY

(i) Genetic algorithm literature- Genetic algorithm is an important and growing part of the artificial intelligence literature with numerous research findings. A good example of such studies could be found in Turney (1995). The study introduces ICET, a new algorithm for cost-sensitivity classification. ICET uses a genetic algorithm to evolve a population of biases for a decision tree induction algorithm. ICET is compared here with three other algorithms for cost-sensitive classification - EG2, CS-ID3, and IDX- and also with C4.5, which classifies without regard to cost.

(ii) Knowledge representation research- Knowledge representation is an important aspect of artificial intelligence research with many dimensions (2003). The following is a cross section of studies carried out on knowledge representation. In a study by Cadoli et al. (2000), the space efficiency of prepositional knowledge representation (PKR) formalism was investigated. It is as- sumed that knowledge is either a set of prepositional interpretations (models) or a set of prepositional formulae (theorems). A formal way of talking about the relative ability of PKR formalisms to compactly represent a set of models or a set of theorems was provided. One interesting result is that formalisms with the same time complexity do not necessarily belong to the same space efficiency class.

(iii) Natural language understanding- The natural language literature broadly consists of many aspects. Within the limits of the work reported here, scholars have investigated into the semantic, mapping, knowledge acquisition and selection procedure of natural languages. The first two listings deal with representation of natural languages in a taxonomy form and linking the semantic together in a group.

Knowledge acquisition and selection have been treated from the viewpoint of nature of tasks and informativeness of the problem considered.

(iv) Reasoning in artificial intelligence- The theory and practice of reasoning in artificial intelligence has extensive documentation (Atkinson and Bench-Capon (2007)). Researchers have worked in terms of: (i) development of axioms that give sound and complete axiomazation for the logic of reasoning; (ii) the theoretical properties of the algorithms used for qualitative temporal reasoning; (iii) what is relevant to a given problem of reasoning (independence); (iv) and methods for qualitative reasoning. A study on axomatising causal reasoning is credited to Halpern (2000). The author axomatised causal models defined in terms of a collection of equations as defined by Pearl.

(v) Machine learning literature- The literature of machine learning is wide (Grumberg et al., 2003, Brodley and Friedl, 1999, Meek, 2001 and Walker, 2000).The following is a brief description of the various machine learning articles. The paper by Schlimmer and Hermens (1993), describes an interactive note-taking system for pen-based computers with two distinctive features. The system is an example of a learning apprentice software-agent. A machine learning component characterises the syntax and semantics of the users information.

THEORY OF COMPUTATION

The paper by Ginsberg (2001) investigates the problems arising in the construction of a program to play the game of contract bridge. GIB, the program being described, involves five separate technical advances: partition search, the practical application of Monte Carlo techniques to realistic problems, a focus on achievable sets to solve problems inherent in the Monte Carlo approach, an extension of alpha-beta pruning from total orders to arbitrary distributive lattices, and the use of squeaky wheel optimisation to find approximately optimal solutions to card-play problems. In another paper, an algorithm for identifying noun-phrase antecedents of pronouns and adjectival anaphors in Spanish dialogues was presented (Palomar and Martines-Barco, 2001). The algorithm is based on linguistic constraints and preferences and uses an anaphoric accessibility space within which the algorithm finds the noun phrase. The algorithm is implemented in prolog. According to this study, 95.9% of antecedents were located in the proposed space, a precision of 81.3% was obtained for pronominal anaphora resolution, and 81.5% for adjectival anaphora. Koehler and Hoffmann (2000) addresses the problem of computing goal orderings, which is one of the longstanding issues in AI planning. It makes two new contributions: the paper formally defines and discusses two different goal orderings; and developed two different methods to compute reasonable goal orderings. The complexity of these
orderings is investigated and their practical relevance is discussed. In a research on non-approaximability results for partially obvservable Markov decision processes, Lusena et al. (2001) show that for several variations of partially observable Markov decision processes, polynomial-time algorithms for finding control policies are unlikely to or simply don't have guarantees of finding policies within a constant factor or a constant summand of optimal. To provide a tool for use by multiagent researchers in evaluating this trade off, a unified framework, the communicative multiagent team decision problem (COM-MTDP) was presented (Pynadath and Tambe, 2002). The COM-MTDP model combines and extends existing multiagent theories, such as decentralised partially observable Markov decision processes and economic team theory. In addition to their generality of representation, COM-MTDPs also support the analysis of both the optimality of team performance and the computational complexity of the agents' decision problem. Cemgil and Kappen (2003) present a probabilistic generative model for timing devi- ations in expressive music performance. The structure of the proposed model is equivalent to a switching state space model. They formulate two well known music recognition problems, namely tempotracking and automatic transcription (rhythm quantisation) as filtering and maximum a posteriori (MAP) state estimation tasks. The simulation results suggest better results with sequential methods. In the article on Bound Propagation, Leisink and Kappen (2003) present an algorithm to compute bounds on the marginals of a graphical model. This can be considered as a set of constraints in a linear programming problem of which the objective function is the marginal probability of the center nodes. They show that sharp bounds can be obtained for indirect and directed graphs that are used for practical applications, but for which exact computations are infeasible.

APPLICATIONS OF ARTIFICIAL INTELLIGENCE

Studies on applications of AI are diverse (Andrew, 2001, Basu et al., 2001, Bui et al., 2002, Peral and Ferrandez, 2003, Plenert, 1994 and Scerri et al., 2002). In the following sub-sections, we present application-based studies.

(i) Applications of AI in planning and scheduling- In recent years, research in the planning community has experienced a wide variety of studies (Boutilier et al., 1999, Brafman and Domshlak, 2003, Cimatti and Roveri, 2000, Hauskrecht, 2000 and Howe and Dahlman, 2002). Research is increasingly moving towards application of planners to realistic problems involving both time and many types of resources. Some of the several planners developed include PDDL2.1, SHOP 2, CRAPU PLAN, NADL, POMP, GRT, FF, PBR, TALplanner, AltAltp, MIPS, Metric-FF Planning System, and SAPA (Refanidis and Vlahavas, 2001, Hoffman and Nebel, 2001, Kvarnstrom and Magnusson, 2003, Sanchez and Kambhampati, 2003, Hoffman, 2003 and Edelkamp, 2003).

(ii) Applications of AI in Robots- Robots are advanced automation technologies generally used for production and non-production activities in order to make life easier and to improve productivity at the work place. In the manufacturing systems, many manufacturers have turned robotics and automation for more reliable manufacturing system solutions. Application examples of robots are found in the construction industry, car parks, nuclear installations, airports, mines, hospitals, welding shipyards, space stations, and automotive applications. In particular, robots are found in unusual places where the environmental and working conditions presents hazards and/or where dangerous tasks are performed.

(iii) Applications of AI in general- The study by Franntz (2003) is an example in this respect. The focus is the use of AI as a framework for understanding intuition. His research shows how the overlaps in Herbert Simon's work and especially his work on AI affected his view towards intuition. Hebert Simon made overlapping substantive contributions to the fields of economics, psychology, cognitive science, AI, decision theory, and organisation theory. Simon's work was motivated by the belief that the human mind, human thinking, decision-making in man, and human creativity need to be mysterious. It was after he helped create "thinking" machines that Simon came to understand human intuition as subconscious pattern recognition. In doing so he showed that intuition need not be associated with magic and mysticism, and that it is complementary with analytical thinking.

(iv) Artificial intelligence in the manufacturing field- In the manufacturing field prominent research has been carried out in a number of areas, including quality monitoring and production scheduling, among others. In a study, Stefanuk and Zhozhikashvili (2002) carried out an analysis of the production and rules in the way they are used in AI systems. The proposed new definition for productions refers to a large number of types of production that may be found in the literature on AI systems. This definition emphasises in the most general way those production components that are important both for theory and for practice and which for some reasons remained unnoticed by many researchers.

CONCLUSION

It is interesting to note that AI has been widely used in many aspects of human lives. A good case is presented by Chan et al. (2003). The authors stated that AI could be applied to the reduction of environmental pollution, conservation and recycling since natural resources are significant social and environmental concerns. As valuable means for pollution control, they noted that minimisation and mitigation remain attractive approaches. However, interactive, dynamic and uncertain features are associated with these processes, resulting in difficulties in their management and control. AI is considered as an effective approach for tackling these complexities. Their study examines the recent advancements of AI-based technologies for management and control of pollution minimisation and mitigation processes. In the area of environmental pollution, AI has been used for management and control of pollution minimisation and mitigation processes. The literature relevant to the area of application of AI to control and management of pollution minimisation and mitigation processes were investigated, especially, technologies of expert systems, Fuzzy logic, and neural networks, which emerge as the most frequency employed approaches for realising process control, and are highlighted. The results not only provide an overview of the updated progress in the study field but also, more importantly, reveal perspectives of research for more effective environmental process control through the AI-aided measures. Several demanding areas for enhanced research efforts are discussed, including issues of data availability and reliability, methodology validity, and system complexity.

REFERENCES

[1] Acid, S. and De Campos. L. M., Searching for bayesian network structures in the space of restricted acyclic partially directed graphs, Journal of Artificial Intelligence Research, Vol. 18, pp.445-490, 2003.
[2] Alai, M., AI, scientific discovery and realism, Minds and Machines, Vol. 14, No. 1, pp.21-42, 2004.
[3] Al-Ani, A. and Deriche, M., A new technique for combining multiple classifiers using the dempstershafer theory of evidence, Journal of Artificial Intelligence Research, Vol. 17, pp.333-361, 2002.
[4] Ambite, J. L. and Knoblock, C. A., Planning by rewriting, Journal of Artificial Intelligence Research, Vol. 15, pp.207-261, 2001.
[5] Andrew, A. M., Short paper: lifemanship and AI. Kybernetes: The International Journal of Systems & Cybernetics, Vol. 30, No. 2., 2001.
[6] Argamon-Engelson, S. and Dagan, I., Committee-based sample selection for probabilistic classifiers, Journal of Artificial Intelligence Research, Vol. 11, pp.335-360, 1999.
[7] Atkinson K. and Bench-Capon T., Practical reasoning as presumptive argumentation using action based alternating transition systems, Artificial Intelligence, Vol. 171, No. 10-15, pp.855-874, 2007.
[8] Baader, F., Lutz, C., Sturm, H. and Wolter, F., Fusions of description logics and abstract description systems, Journal of Artificial Intelligence Research, Vol. 16, pp.1-58, 2002.
[9] Bacchus, F., The power of modeling - a response to PDDL2.1., Journal of Artificial Intelligence Research, Vol. 20, pp.125-132, 2003.
[10] Baget, J. F. and Mugnier, M. L., Extensions of simple conceptual graphs: the complexity of rules and constraints, Journal of Artificial Intelligence Research, Vol. 16, pp.425-465, 2002.
[11] Balazinski, M., Czogala, E., Jemielniak, K. and Leslie J., Tool condition monitoring using artificial intelligence methods, Engineering Applications of Artificial Intelligence, Vol. 15, Issue 1, pp.73-80, 2002.
[12] Barber, F., Reasoning on Interval and Point-based Disjunctive Metric Constraints in temporal contexts, Journal of Artificial Intelligence Research, Vol. 12, pp.35-86, 2000.
[13] Barzilay, R., Elhadad, N. and McKeown K. R., Inferring strategies for sentence ordering in multidocument news summarization, Journal of Artificial Intelligence Research, Vol. 17, pp.s 35-55,2002.
[14] Basu, C., Hirsh, H., Cohen, W. W. and Nevill-Manning, C., Technical paper recommendation: a study in combining multiple information sources, Journal of Artificial Intelligence Research, Vol. 14, pp.231-252, 2001. s
[15] Baxter, J., A model of inductive bias learning, Journal of Artificial Intelligence Research, Vol. 12, pp.149-198, 2000.
[16] Baxter, J. and Bartlett, P. L., Infinite-horizon policy-gradient estimation, Journal of Artificial Intelligence Research, Vol. 15, pp.319-350, 2001.
[17] Baxter, J., Bartlett, P. L. and Weaver, L., Experiments with infinite-horizon, policy-gradient Estimation, Journal of Artificial Intelligence Research, Vol. 15, pp.351-381, 2001.
[18] Becker, A., Bar-Yehuda, R. and Geiger, D., Randomised algorithms for the loop cutset problem, Journal of Artificial Intelligence Research, Vol. 12, pp.219-234, 2000.
[19] Bhattacharyya, C. and Keerthi, S. S., Mean field methods for a special class of belief networks, Journal of Artificial Intelligence Research, Vol. 15, pp.91-114, 2001.
[20] Bhuyanb, Tea quality prediction using a tin oxide-based electronic nose: an artificial intelligence approach, Sensors and Actuator B: Chemical, Vol. 94, Issue 2, pp.228-237, 2003.
[21] Birnbaum, E. and Lozinskii, E. L., The good old Davis-Putnam procedure helps counting models, Journal of Artificial Intelligence Research, Vol. 10, pp. 457-477, 1999.
[22] Blockeel, H., Dehaspe, L., Demoen, B., Janssens, G., Ramon, J. and Vandecasteele, H., Improving the efficiency of inductive logic programming through the use of query packs, Journal of Artificial Intelligence Research, Vol. 16, pp.135-166, 2002.
[23] Bod, R., A unified model of structural organisation in language and music, Journal of Artificial Intelligence Research, Vol. 17, pp.289-308, 2002.
[24] Boddy, M. S., Imperfect match: PDDL 2.1 and real applications, Journal of Artificial Intelligence Research, Vol. 20, pp.133-137, 2003.
[25] Boutilier, C. and Brafman, R. I., Partial-order planning with concurrent interacting actions, Journal of Artificial Intelligence Research, Vol. 14, pp.105-136, 2001.
[26] Boutilier, C., Dean, T., Hanks, S., Decision-theoretic planning: Structural assumptions and computational leverage, Journal of Artificial Intelligence Research, Vol. 11, pp. 1-94, 1999.
[27] Brafman, R. I., On reachability, relevance, and resolution in the planning as satisfiability approach, Journal of Artificial Intelligence Research, Vol. 14, pp.1-28, 2001.
[28] Brafman, R. I. and Domshlak, C., Structure and complexity in planning with unary operators, Journal of Artificial Intelligence Research, Vol. 18, pp.315-349, 2003.