The social landscape: reasoning on the social behavior spectrum essay examples

Introduction (Summary)

A society is a connected group of individuals enabled by a long evolutionary process that enables them to acquire the skills necessary to survive in a tight social structure. It is difficult, but possible, to capture the structure of society in a model and apply the same model to navigate different problems and achieve objectives. While humans have become socially competent after many years of evolution, artificially intelligent systems need an explicit way in which they can represent, make and justify their decisions. Several approaches have been suggested over time through research. In robotics, models have been applied with the goal of capturing the social behavior spectrum and designing intelligent agents using this framework. One such model is the Social Behavior Activity model (SBA), which is derived from the Belief-Desire-Intention (BDI) model of practical reasoning. The social behavior spectrum consists of several elements such as altruistic behavior (increasing another person's outcome), cooperation, individualism (own outcome) and competition (increasing own outcome while limiting that of opponents). Knowing the extent of the components of the spectrum can help to expect how the interaction between members of a group will be as well as knowing which cooperative groups to join. This information, if utilized effectively, may lead to strategic decision-making.

The specific contribution of this source is to propose a model which provides a theoretical basis which can be used to explain and predict the social behavior of agents. In addition, it provides design principles which guide the creation of agents that are capable of behaviors that reflect the entire spectrum.

This source covers the topics of The Social Behavior Spectrum; Social Reasoning; decision-making on group membership and the relationship of social behavior to Boolean games and other BDI-Based Models. This source, however, does not delve into specific applications of the Social Behavior Spectrum such how it may be applied to other spheres of life such as marketing, business and healthcare.

The Social Behavior Spectrum importance in decision-making has also been emphasized in several other researches on social behavior. For example, in October 2013, the National Institutes of Health (NIH) made a Funding Opportunity Announcement (FOA) with the intention of building an extramural research program which brings together computational social sciences. This is to increase the understanding of social phenomena and behavior so as to improve human health.

This source is cited by Signoretti & Feitosa, which is a research on improvement of the reasoning and behavior of agents. The research holds that simulations that are based on intelligent agents may benefit from optimizations derived from interaction between these agents and environmental changes.

The research by Kruijff, Janíceˇk, and Zender is related to this source. This is because it provides a behavior model as an attempt to enhance interaction between humans and robots through teamwork, communication and experience modeling. The similarity with this source is in the fact that both models are intended for the purposes of decision-making in real life situations.

Conclusion

The SBA model spans the social behavior spectrum as an attempt to provide the architecture necessary in deriving design principles for agents that are capable of behaviors that reflect the entire spectrum. This model has great potential in the fields of health, business, and general artificial intelligence applications.

References

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