



**INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH  
TECHNOLOGY**

**The Logic of Good and Bad**  
**Ankur Singh Bist <sup>\*1</sup>, Paravati devi <sup>2</sup>**

<sup>\*1</sup> Computer Engineering, Govind Ballabh Pant, University of Agriculture and Technology, Pantnagar,  
India

<sup>2</sup>Electrical Department, U.P.P.C.L., India

[ankur1990bist@gmail.com](mailto:ankur1990bist@gmail.com)

---

**Abstract**

This paper is designed to solve a problem of artificial intelligence where the purpose is to develop a generic idea to solve the subjective issue of Good and Bad. If generic idea is not found then it would be impossible to implement it in real time situation. Our purpose is to develop a classifier based on our proposed approach towards good and bad.

**Keywords:** Good, Bad, Intelligence, Harmful, Life form.

---

**Introduction**

The logic of good and bad actually is subjective problem so if any intelligent system needs to be developed regarding this issue then it is the big challenge to generalize this issue. This problem is a problem that is related to philosophy and human behaviour so in order to solve the existing situation we have to develop test cases and then have to check the concept design by us deals with problem in exact manner that is required or not. In this paper we have made the following contributions:

1. Designed a generic approach to solve the issue of good and bad so that it can be used to design an intelligent system in concerned domain.
2. Proposed a framework to design an intelligent system for "Indian Courts".

From long time the basic need of artificial intelligence is to design an expert system that can take design. With the best of our knowledge we found that this paper is the first attempt to deal with this situation, the interest of problem statement motivated us to solve this problem.

There are lot of general question that creates contradiction in what we think and what is the reality. Let take general questions and try to see the answer in term of good and bad for these questions.

1. If a lion is killing a goat whether this event is good or bad?
  1. Find answer as a observer.

1.2 Is the activity done by lion bad?

The above question is the sample problem for which we want to provide a model for the purpose of classification either in class 1 that is good or in class 2 that is bad.

**Proposed approach**

To understand the current problem firstly we have to understand what is good and bad? To define the good and is again a critical issue because general perception says that any thing that is good for one can be bad for others. According to our theory we defined good as follows:-

An optimal decision is called good so good is defined as: "Least harmful or not harmful and intelligent decision" and for analyzing the harmful term the knowledge of as many factors as possible or all factors available required to solve the situation.

Good = Optimal decision= (Least harmful or Not harmful)

Another important point that the other that humans other organism do not have much brain that they can decide the situation good and best because the do not have complex functionality in brain to sort out the situation so that they can decide the concept of harm in any specific condition.

Now the problem reduced to smaller domain because one point is clear the good and bad is only defined for intelligent organisms like humans now our second

step is to derive and sort out the situation for humans. Now we can answer the question number 1, 1.1 and 1.2 the answer for these questions is that it is neither good nor bad because good or bad is not defined for lion and goat. Moving towards the case of humans we firstly have to say that this concept is only for checking the given situation is good or bad independent to individual prospective.

**Classification cases**

Case1: In case of survival, the good will be least harmful decision in this case in general if we watch nature intelligence wins instead of power so in present scenario of life form the humans are at the top of intelligence tree so killing other organism only for survival is least harmful and another reason is that the death phenomenon is different for low brain community in aspect of their interconnectivity, but another important aspect is that if there exist case of survival and two options are there

1. Animal
2. Plant

In this case if we want to find least harmful event for survival then it will be plant because pain is not defined for plants as defined for animals because plants have less senses so sense of pain is there for them but very less or of different nature in comparison of animal hence plant eating is good decision according to our theory

Case2: In case where self killing is beneficial for the survival of group then the decision of self killing is least harmful and according to our proposed theory it is good.

Case3: All other general situations where the objective is easy to find.

**Proposed expert system**

Case Based Reasoning and Neural Network can be used for classification of concerned problem. **Case-based reasoning (CBR)**, broadly construed, is the process of solving new problems based on the solutions of similar past problems. An auto mechanic who fixes an engine by recalling another case that exhibited similar symptoms is using case-based reasoning. A lawyer who advocates a particular outcome in a trial based on legal precedents or a judge who creates case law is using case-based reasoning. So, too, an engineer copying working elements of nature is treating nature as a database of solutions to problems.

Case-based reasoning is a prominent kind of analogy making [1].

It has been argued that case-based reasoning is not only a powerful method for computer reasoning, but also a pervasive behavior in everyday human problem solving; or, more radically, that all reasoning is based on past cases personally experienced. This view is related to prototype theory, which is most deeply explored in cognitive science.



Figure 1: Case Based Reasoning [1]

This approach can be used to make reasoning for the expert system design. We divide the classification of good and bad. The steps are divided as follows:

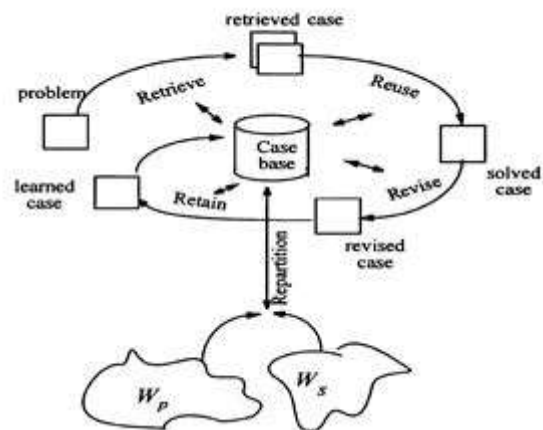


Figure 2: The R<sup>5</sup> model of CBR [2]

Neural networks are similar to biological neural networks in that functions are performed collectively and in parallel by the units it is very important point because the biological neurons perform the function in parallel artificial neural network are not work accurately like biological neuron, rather than there being a clear description of task in smaller groups to

which various units are assigned. The term "neural network" usually refers to models employed in statistics, cognitive psychology and artificial intelligence. Neural network models which emulate the central nervous system are part of theoretical neuroscience and computational neuroscience. Neural network models in artificial intelligence are usually referred to as artificial neural networks (ANNs).

### **Conclusion**

This Paper explains in detail about the classification fact regarding with good and bad. CBR and Neural network is suggested as suitable technique required for classification. This paper will be helpful for those working in the direction of human computer interaction and artificial intelligence.

### **References**

1. *www.wikipedia.com*
2. *Finnie G., Sun Z. , Model for case based reasoning, Elsevier.*