# NB Theory with Bargaining Problem: A New Theory

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**Submitted**: 20 Sep 2022; **Accepted**: 16 Nov 2022; **Published**: 21 Nov 2022

Citation: Noorulden Basil, (2022). NB Theory with Bargaining Problem: A New Theory, J Curr Trends Comp Sci Res, 1(1), 01-02

### Abstract

The new theory is proposed to give suitable solutions for all researchers and authors to achieve the desired set of values for each engineering system when using the single type of algorithm with all optimized algorithms and this algorithm will apply to each engineering system depending on the main variables, dimensions, and functions and all these parameters will be set by the main library when connected with the system based on the tune for a suitable searching and the selection is auto made by this single algorithm additionally, this theory can be done by using MATLAB Software that inspired from the idea of bargaining theory and Noorulden Basil theory is referred to the term of NB Theory.

Keywords: Bargaining Theory, NB Theory, Optimization Algorithm, Intelligent Thing, MATLAB

# Introduction

The bargaining theory becomes very interested due to its important issue, especially with the two-person game, additionally whether applied on the single individuals or the double group individuals and from this economic theory by, the new theory of optimization algorithm with artificial intelligence is proposed to solve these optimized values for all fields, especially to the mathematics and general engineering [1]. The new theory is extended and can be applied with MATLAB libraries, for example, any optimization algorithm can be used by its function and calling additionally variables, dimensions, variables issues are varying from one system to another and types of systems taken into account whether can be linear or nonlinear systems. The values apply issue is popular and can make the general system work in the stable/unstable mode therefore the lower/upper cases can be more specific and do the case with better work. The bargaining theory with a new theory can be applied to more extent to achieve this economic theory with artificial intelligence technique and the relation with a large number of persons, the solutions instead of with the coordination points and locations for each person with utility for overall. The new theory proposes a new method to solve the optimization algorithms to set all issues mentioned above with AI [2-5].

#### **NB** Theory

The new theory is a single algorithm that can be applied to curtail all researchers/authors' efforts to achieve and collect the desired results and solutions instead of using other optimization algorithms. The first step to applying by inserting all libraries to MATLAB additionally, each library that consists of one algorithm with its function and the selection and calling for each algorithm can do by testing the tune for each engineering system, the main purpose of the function is to call all artificial intelligence algorithms to depend upon the main weights, variables, dimensions for each engineering system with auto-tuning such as the work for each intelligent thing. The algorithm will look for the more suitable libraries that consist of all optimization algorithms to perform and give the researchers/ authors the suitable precision results with the quick process and also consider the iteration number all of the parameters will set by this new novel algorithm.

### **Conclusions**

The main goal in this theory is to give the solutions for all researchers and authors by inserting all optimization algorithms as a single type in the MATLAB library to give authors the desired results for all various types of their engineering systems to solve the usage of the algorithm additionally this theory idea to make the solutions better to find their parameters/variables values in the least of time with the desired values instead of utilizing of each algorithm with lower/upper bounds according to the bargaining problem from economic field.

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