ANALYSIS OF PARAMETERIZATION VALUE REDUCTION OF SOFT SETS AND ITS ALGORITHM

Mohammed Adam Taheir Mohammed[1*], Wan Maseri Wan Mohd[1], Ruzaini Abdullah Arshah[1], M. Mungad[2], Edi Sutoyo[2] and Haruna Chiroma[3,4]

[1]Faculty of Computer Systems & Software Engineering, Universiti Malaysia Pahang,
26300 Gambang, Pahang, Malaysia
[2]Department of Information System,
[3]Department of Artificial Intelligence, University of Malaya
50603 Pantai Valley, Kuala Lumpur, Malaysia
[4]Computer Science Department, Federal College of Education (Technical), Gombe,
Nigeria
[*]Email: mohammed_taher30@yahoo.com
Phone: +601126031065

ABSTRACT

In this paper, the parameterization value reduction of soft sets and its algorithm in decision making are studied and described. It is based on parameterization reduction of soft sets. The purpose of this study is to investigate the inherited disadvantages of parameterization reduction of soft sets and its algorithm. The algorithms presented in this study attempt to reduce the value of least parameters from soft set. Through the analysis, two techniques have been described. Through this study, it is found that parameterization reduction of soft sets and its algorithm has yielded a different and inconsistency in suboptimal result.

Keywords: Microwave Irradiation, Nanohexagons, Nanomaterials, Photoluminescence, Quantum Size Effect, Semiconductors.

INTRODUCTION

Nowadays, there are major issues in redundancy of data on an ongoing basis as a result of development, especially in decision-making; therefore the need of extra memory is necessary which affects the storage and copies space, thus, it is necessary to reduce the amount of data. For this reason, researchers should develop smart techniques to address this problem by optimal solutions as well as taken into account sub optimal, so these intelligent applications must inherit the characteristic of original soft data. Uncertain data occurs on many real life problems in engineering, medical, social and medical sciences (Maji and Biswas, 2002) which need to be managed and solved. Soft set theory is one of mathematical principles that can be used to solved uncertain data problems (Molodtsov, 1999). The theory of soft set was introduced by Molodtsov (1999) as a new way for handling uncertain data. Molodtsov (1999) figured out that "one of the main soft set theory advantages that it is free from the inadequacy of the parameterization tools, unlike in the theories of fuzzy set, probability and interval mathematics".

The result of (Chen et al., 2005) on the parameterization reduction of soft sets and its algorithm will be analyzed to finds its correctness, further the result by (Ma et al., 2011) will be discussed in terms of whether it has achieve the optimal and sub optimal decisions. This paper is organized as follows: Section 2 describes the concept of