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FORWARD

By the grace of Allah, it is a great pleasure to introduce the issue No. 16 which is the first in the fifth volume of: **The International Journal on Islamic Applications in Computer Science and Technology**.

The success and the welcome of this Journal by researchers from many countries, gave us great encouragement for continuing issuing in the due time.

This Journal is aimed at publishing original research papers in the field of Islamic Applications in computer science and technology. This field is catching a momentum in the recent years. As a Journal interested in this field, it is the first International Journal of its specific field. As research is growing in this field, we hope that this Journal will be a platform for researchers working in the field to publish their research.

This issue contains five papers.

The first one is entitled: **Quran Question Answering System Using Arabic Number Patterns (Singular, Dual, Plural)** A question answering system applied to the Holy Quran written in Classical Arabic is described. Some characteristics of the Arabic language were used to enhance the answer extraction: one of these important characteristics is number in nouns: singular, dual and plural. A version of the question-answering system was built which uses noun number patterns to process the number in Arabic questions and candidate answers, which enhances the result set of answers by adding more words and meaning. A corpus of questions and its answers about the Holy Quran was used to test and compare baseline and enhanced versions of this Quran Question Answering system.

The second paper is entitled: **Retrieval Performance for Malay Quran**. The Holy Quran is very rich text in its original language, Arabic. Hence its translation to other languages inevitably, results in a loss of a lot of meanings included in the original text. Hence it is better to say that "Quran translation" is the translation of meaning of Quran which is understood by the person who translated the Quran rather than the actual meaning. Hence it is questionable to say that there is "Malay Quran" or "English Quran".

This research investigated the existing problems related to the study of Quran and studies the current search techniques used in research on the Quran, especially the meaning of Quran in Malay language. This research will help researchers understand and learn the current scenario of research on the Quran.

The third paper is of the title: **Integrated Modalities Search Framework for Digital English Language Text Holy Qur'an and Tafsir**. This paper uses qualitative explorative approaches to present a framework through which "meaning", "teaching", "civilization", "scientific miracles" and "Aqidah and Ibadah" are integrated for any English transliterated term of Qur'an into English explanation source through the knowledge of Tafsir. As a result, online user's query will extract desirable sequences of refined integration of Quran explanation inculcating knowledge composition of Holy Qur'an and Tafsir. Three short surahs of Holy Qur'an and Tafsir are used for the evaluation of the proposed framework. Text processing procedure is applied and a corpus of the English transliterated terms explanation by Tafsir of Holy Qur'an and Tafsir are generated. This framework is suitable for the design of search engine suitable for spreading the knowledge of Holy Qur'an and Tafsir.

The fourth paper is entitled: **Bluetooth Based Holy Places Crowds Control System**. This paper tries to tackle one of the main problems that still exists in the Holy places and causes lots of damage and danger to the pilgrims, that is, the crowd. Crowds are essentially caused by the performance of the religious duties by millions of Muslims in a unique place in short period of time. Image processing techniques for crowds' detection is limited by camera coverage and need of continuous light. Positioning systems based on wireless technologies such as GPS, Bluetooth and WiFi are another alternative for crowd detection. In this work, a Bluetooth Based Holy Place Crowds Control System (BHPCC) has been developed for controlling the crowds in holy places. This system is able to find lost pilgrims and control crowds by detecting them and recommend less crowded places for pilgrims.

The fifth paper is entitled: **Text Analytics and Transcription Technology for Quranic Arabic**. Statistical techniques such as keyword extraction is utilised to explore semiotic relationships between sound and meaning in the Quran, invoking a Saussurean-type view of the sign as '...a bi-unity of expression and content...' (Dickins 2007). This investigation entails: (i) text data mining for statistically significant phonemes, syllables, words, and correlates of rhythmic juncture; and (ii) interpretation of results from interdisciplinary perspectives: Corpus Linguistics; tajwīd science; Arabic Linguistics; and Phonetics and Phonology.

Editor-In-Chief

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