

IJASAT

International Journal on Islamic Applications in
Computer Science and Technology

Volume 6

Issue 1

March 2018

International Journal on Islamic Applications in Computer Science And Technology

Volume 6, Issue 1, March 2018

EDITED BY

Prof. Dr. Mohammed Zeki Khedher

ISSN (Online): 2289-4012

International Journal on Islamic Applications in Computer Science and Technology is published both in traditional paper form and in Internet. This journal is published at the website <http://sign-ific-ance.co.uk>, maintained by Design for Scientific Renaissance, Malaysia.

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Typesetting: Camera-ready by author

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FORWARD

By the grace of Allah, it is a great pleasure to introduce the issue No. 20 which is the first in the Sixth 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 three papers. The first one is entitled: **Investigating the Rate of Agreement and Disagreement of Tense and Aspect of Quranic verbs in Arabic to English Translations: Experimental Results and Analysis**. In this paper, the Qur'anic Arabic corpus of verbs is used in Arabic with their English translations by building a sub-corpus of verbs. The study uses a statistical method incorporating SPSS and Kappa feature of SPSS to investigate the rate of agreement and disagreement of Quran Verb Tense and Aspect in Arabic to English translations. The aim is to provide information that can be used to address some of the challenges that arise when translating between Arabic and English. The SPSS results indicate the highest percentage for past, present and future tenses of Quranic Arabic verbs; the progressive and perfective aspect has the lowest percentage. The results, using Kappa, show a clear disagreement between the original text, and its translations, while the agreement varies between strong and weak. This indicates that there are difficulties when translating Arabic verbs into English.

The second paper is entitled: **Hotspots for Enhancing Quranic Speech Recognition**. This paper discusses hotspots where minor changes in these spots can lead to significant changes in results. Speech recognition is a process with multiple stages and in each stage; there are spots to be enhanced. Recording principles and avoiding issues are essential steps. Collecting the relevant data or designing the data in such form or structure can enhance the training model. In addition, extracting phonemes using a smart acoustic model or using a robust language model tool are another important spots for improvement. Finally, using Deep Neural Network (DNN) as a speech recognition model has been proved to achieve very good results.

The third paper is of the title: **A User-Centered Design based Collaborative System for Jum'a Preacher Scheduling**. Majlis Tabligh Muhammadiyah of Bandung Regency of Indonesia is currently managing 21 Mosques in its area. With only 75 preachers, handling 1.092 slots for Jum'a preacher scheduling every year is extremely difficult while it managed by the traditional mean. Other than collision, special request and constraints proposed by Imam (preacher) or Mosque manager make the scheduling process worst. This paper proposes a collaborative based system to address scheduling system with special requirements. Scheduling compilation will be divided into three stages. Then it uploaded into the system. As a result, Imam and Mosque managers are able to offer slots as their best choice, while Majlis tabligh administrator can easily manage Jum'a preacher scheduling.

Editor-In-Chief

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