

International Journal on Islamic Applications in Computer Science and Technology

Volume 12 Issue 1

March 2024

International Journal on Islamic Applications in Computer Science And Technology

Volume 12, Issue 1, September 2024

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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Foreword

By the grace of Allah, it is a great pleasure to introduce this issue of: The International Journal on Islamic Applications in Computer Science and Technology

During the 11th year of the publication of this Journal, this issue is the 43rd of this journal. We thank Allah for enabling us to continue all through these years.

With the wide specialization of this Journal, it attracted contributions from researchers from all over the world. We pray to Allah to put his "Baraka" in the contents of the Journal and spread the fruits of its contents in the future.

This issue contains two papers. The first one is entitled: Acoustic Modeling for Indexing and Retrieval of Quranic Verses

Despite the advancement of AI technology in acoustic modeling, the intricate nature of Arabic, with its diverse accents and dialects, poses a formidable challenge for developing a resilient model for Quranic recitation. This paper addresses this challenge by introducing a deep learning model that withstands linguistic variations and stays unaffected by diverse recitation styles and the nuances of the Tajweed. In this paper, the deep features extracted from this model prove exceptional performance, achieving a remarkable accuracy of approximately 96.30% in classification tasks. To underscore the significance of the deep learning network as an acoustic model, developed a content-based verse retrieval system (CBVeRse). Utilizing the previously trained model, this system exhibited an impressive performance with a mean Average Precision (mAP) of 96.52%. This underscores the efficiency and importance of this approach in enhancing the understanding and application of the Holy Quran's acoustic attributes.

The second paper is entitled: ChatGPT for Identifying Saudi Arabic Dialects

Dialects spoken by Saudi's namely; Hejazi (spoken by people in western regions), Najdi (spoken by people in central regions), Sharqawi (spoken by people in eastern regions), Janubi (spoken by people in southern regions), and Shamali (spoken by people in northern regions) were selected in this study. In this study, the ability of ChatGPT is examined to identify these sub-dialects by collecting a representative sample dataset from Twitter. The experimental results demonstrate that ChatGPT achieved an overall accuracy of 0.42 in our sample dataset.

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