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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**

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: **Localization and Extraction of Qur'an Verses Using Computer Vision**

Localizing Quranic verses, by detecting the verse bounding boxes, with respect to Quran page images is crucial for UI applications. These applications rely on the user interacting with the verse to view the translation, share the verse, listen to its audio, etc. Moreover, the automatic detection of the verse bounding boxes enables additional image processing and analysis of the Quran pages at the verse level. For these use cases, we need to map the user's click within the image boundary and know which verse is selected. In this paper, a computer vision approach using a Faster RCNN neural network to analyze Quran page images and automatically localize the boundary of every verse with respect to the page is proposed. This information can, later on, be fed into various UI applications that allow the user to interact with Quran verses. The model was trained and run in several experiments on the following narrations: Hafs, Douri, Shubah, Qalon, and Warsh. Results showed 100% accurate detection of all verse boundaries for these narrations.

The second paper is entitled: **AI Classification of Linguistic Expression Between The Quran, The Hadith, and Pre-Islamic Poems Using an LSTM Deep Learning Model**

This paper demonstrates the distinct and separate source of authorship between the Quran, Hadith, and Pre-Islamic Poetry using an Artificial Intelligence deep learning model of Long Short-Term Memory (LSTM) network. The Quran has 6236 verses, and 5181 Hadiths were extracted from Sahih Bukhari's book with verified trusted chain of narrations, as well as used 858 lines of Pre-Islamic Poetry. The three models were trained on the same percentage of available text from the Hadiths, and Poems, and then tested each of the models on the residual 75%, 80%, and 85%**,** respectively, of Quran verses, Hadiths, and Poems. Accurate classification of the three LSTM Models of testing Quran verses was 98.58%, 98.95%, and 83.47% respectively. Accurate Hadith's classification accuracy of the three LSTM Models 98.97%, 99.73%, and 99.59% respectively. Accurate classification of the three LSTM Models for the Poems was 100%, 100%, 100% respectively. These results demonstrate the distinct nature of the expression style of authorship between the Quran, the Hadith, and the Pre-Islamic Poetry leading to the conclusion that they are indeed from different sources of authorship.

TABLE OF CONTENTS