

IJASAT

International Journal on Islamic Applications in
Computer Science and Technology

Volume 8

Issue 1

March 2020

International Journal on Islamic Applications in Computer Science And Technology

Volume 8, Issue 1, March 2020

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.

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, re-use of illustrations, recitation, broadcasting, reproduction on microfilms or in any other way, and storage in data banks. In its current version, and permission for use must always be obtained from Design for Scientific Renaissance.

Design for Scientific Renaissance

Malaysia

Typesetting: Camera-ready by author

Editor-In-chief

- Prof. Dr. Mohammed Zeki Khedher, Jordan University, Jordan

Advisors

- Prof. Dr. Zaghloul al-Najjar, The World Islamic Science and Education University, Jordan
- Prof. Dr. Hany Ammar, West Virginia University, USA
- Prof. Dr. Idris Al-Kharchaf, University of Mohammed V, Rabat, Morocco

Managing Editor

- Dr. Akram M. Zeki, International Islamic University Malaysia, Malaysia

Assistant Editor

- Dr. Mustafa Ali Abuzaraida, Univeristi Utara Malaysia, Malaysia

Editors

- Prof. Dr. Abdelhak Lakhouaja, Mohammed First University, Morocco
- Prof. Dr. Abdelkader Adla, University of Oran 1 Ahmed Benbella, Algeria
- Prof. Dr. Abdeslam JAKIMI, Moulay Ismail University, Meknes, Morocco
- Prof. Dr. Adnan Abdul-Aziz Gutub, Umm Al-Qura University, Makkah, Saudi Arabia
- Prof. Dr. Ahmed Ferchichi, University of Tunisia, Tunisia
- Prof. Dr. Teddy Montoro, Universitas Siswa Bangsa International, Indonesia.
- Dr. Abdellah Yousfi, University of Mohamed V, Morocco
- Dr. AbdulSattar M. khidhir, Mosul Technical Institute, Iraq
- Dr. Ali A. Alwan, International Islamic University Malaysia, Malaysia
- Dr. Hikmat Ullah Khan, COMSATS Institute of Information Technology, Pakistan
- Dr. Ibrahim Suliman Ahmed Ashmaiq, International Islamic University Malaysia, Malaysia
- Dr. Jamil Itmazi, Palestine Ahliya University, Palestine
- Dr. Marzanah A. Jabar, Universiti Putra Malaysia, Malaysia
- Dr. Mohamed Tahar Ben Othman, Qassim University, Saudi Arabia
- Dr. Mohammad Abdolshah, Islamic Azad University, Iran
- Dr. Mohammad Said Desouki, Higher Institute of Applied Science and Technology, Syria
- Dr. Nor Hasbiah Ubaidullah, Sultan Idris Education University, Malaysia
- Dr. Omar Tayan, Taibah University, Saudi Arabia
- Dr. Rashid A. Saeed, Sudan University of Science and Technology (SUST), Khartoum, Sudan
- Dr. Talaat Wahby, Sudan University of Science and Technology, Sudan
- Dr. Yousef Daradkeh, Salman Bin Abdulaziz University, Saudi Arabia
- Dr. Yousef Farhaoui, Moulay Ismail University, Morocco
- Dr. Youssef Iraqi, Khalifa University, UAE
- Dr. Youssef Zaz, Abdelmalek Essaadi University, Morocco

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: **Electronic Banking: Opportunities and Future Challenges of Islamic Economy in Indonesia**. Electronic banking is one example of the ease of finance activities in the digital economy. This activity makes the efficiency and effectiveness of time on the sidelines of work activities that consume attention and extra energy, however, in reality, not all the people convenience and helped by using electronic banking applications. Technology facilitates Islamic Banking by using the Syariah E-Banking application. This Syariah Banking Application is a banking service that combines information systems and technology to support banking activities without having to visit a bank office. Electronic banking applications include phone banking, mobile banking and internet banking. The method of this research is quantitative with 108 respondents, with several statistical tests. The result is the electronic banking expected to be a vehicle in improving public services, funds or and new technologies that are expected to have an opportunity to provide prime, fast and affordable Islamic economy services to all levels of society.

The second paper is entitled: **Ontology Based Knowledge Representation for Prayer Complications**. This research proposed an ontology based knowledge representation for Prayer Complications using ontology constructs such as concepts, properties, constraints, rules (SWRL). This ontology will answer the user's complex queries according to Prayer Complications using SPARQL query language and enable the access of knowledge to everyone at any time. In this research, as a first step, the ontology is developed according to Hanafi School, however the conceptualization in ontology is general enough to modify it according to other schools of Fiqh. Finally, the application has been developed to understand the benefits of the proposed research.

Editor-In-Chief

TABLE OF CONTENTS

Title / Authors	Page No.
The International Journal on Islamic Applications in Computer Science and Technology Shinta Maharani, Qiyqiy Fithri Awamirillah, Miftahul Ulum, Agus Purnomo	1
Ontology Based Knowledge Representation For Prayer Complications Hamza Zafar, Quratulain Rajput	11