

Universal Academy of Science and Technology (UNITECH) was established by a number of scholars, researchers and academicians in various fields especially in the field of Science and Technology; their primary aim is to disseminate knowledge among human beings all over the world.



# Design for Scientific Renaissance

Design *for* Scientific Renaissance is established by a number of scholars in various fields; their primary aim is to disseminate knowledge among human beings all over the world.

## Vision

To promote a scientifically fair globalized world.

## Missions

To provide the base for promoting advanced research.

To publish articles and papers in various fields, that adds high value empirically and theoretically.



# Publications of Universal Academy of Science and Technology - UniTech

# منشورات الأكاديمية الدولية للعلوم والتكنلوجيا



المجلة الدولية للتطبيقات الإسلامية في علم الحاسب والتقنية-إجازات الرقم التسلسلي 4020-2289

International Journal on Islamic Applications in Computer Science and Technology- IJASAT E-ISSN 2289-4012



# 2nd International Conference on Islamic Applications in Computer Science and Technologies

# Organized By







Sponsored By



# 2nd International Conference on Islamic Applications in Computer Science and Technologies

# Background

Information Technology and its applications in different aspects of life have had a significant impact in serving Islam and Sharia in all its forms, including the service to the Holy Quran, Hadith, Fiqh and other Sharia sciences. This conference aims at providing the most important applications and Software that could contribute to serving Muslims and their religion and community, and aims to encourage scientific research by using IT tools in Sharia sciences as well as presenting and evaluating Muslims Contributions in Computer Science Applications and Technology. The conference shall also be a platform to serve Arabic language, Machine Translation to and from Arabic, Natural Language Processing of Arabic Language and voice & character recognition of Arabic language.

#### Tracks of IMAN 2014:

- Muslim Contributions in Computer Science Applications and Technology
- IT in the service of the Holy Quran and its Sciences
- IT in the service of the Hadith and the Sunnah
- IT in development of Islamic society
- IT in the service of Islamic Jurisprudence and its Sciences
- IT in the service of Islamic History and Civilization
- IT in the service of Islamic knowledge and the role of Muslim Scholars
- IT ethics from Islamic point of view
- Islamic Databases
- Evaluation of Islamic Software
- Computer Applications in the service of Arabic language and Machine Translation
- Natural Language Processing of Arabic Language

# المؤتمر الدولي الثاني للتطبيقات الإسلامية في علوم الحاسوب وتقنياته

#### المقدمة

تقنية المعلومات بإمكاناتها المذهلة، وبتطبيقاتها المتعددة في مختلف جوانب الحياة كان لها الأثر الكبير في خدمة الإسلام والعلوم الشرعية بكافة اشكالها بما في ذلك خدمة القرآن الكريم والحديث الشريف والسيرة والفقه وغيرها من العلوم الشرعية. يهدف هذا المؤتمر إلى تقديم أهم تطبيقات وبرامج الحاسوب التي ساهمت في خدمة المسلم في دينه ومجتمعه وأسرته، كما يهدف إلى تشجيع البحث العلمي في العلوم الشرعيه بمساعدة الحاسوب ونشر انتاجات المسلمين في هذا المجال والوقوف على جوانبها. وكان للغة العربية نصيبها من هذا الاهتمام عن طريق المعالجة الآلية وإدراك النص المكتوب أو المقروء بالإضافة إلى الترجمة الآلية من العربية وإليها

#### محاور المؤتمر

- انتاجات المسلمين في تطبيقات علوم الحاسوب وتقنياته
  - تقنية المعلومات في خدمة القرآن الكريم وعلومه
- تقنية المعلومات في خدمة الحديث الشريف والسنة النبوية
  - تقنية المعلومات في خدمة التاريخ والحضارة الإسلامية
- تقنية المعلومات في خدمة المعارف الإسلامية ودور علماء المسلمين
  - الأخلاق في مجال تقنية المعلومات من وجهة نظر إسلامية
    - تطبيقات الحاسوب في خدمة اللغة العربية والترجمة الآلية
      - تطبیقات قواعد البیانات في المجالات الشرعیة
        - المعالجة الآلية للغة العربية
      - أية مواضيع أخرى في تقنية المعلومات تخدم الإسلام.

# Organizing Committees لجان المؤتمر

General Chair: Prof. Dr. Mohammed Zeki Khedher, Jordan University, Jordan

#### Advisers:

- Prof. Dr Ghazali Bin Sulong, University Technology Malaysia, Malaysia
- Prof. Dr. Abdelhak LAKHOUAJA, Mohammed First University, Oujda, Morocco
- Prof. Dr. Abdulaatif Saleh Alnaeem, Imam Mohammad Ibn Saud Islamic University, Saudi Arabia
- Prof. Dr. Adnan Abdul-Aziz Gutub, Umm Al-Qura University, Makkah, Saudi Arabia
- Prof. Dr. Azzeddine Lazrek, Cadi Ayyad University Marrakech, Morocco
- Prof. Dr. Farid Ghani, Universiti Malavsia Perlis, Malavsia
- Prof. Dr. Hamed Al-Raweshidv. Brunel University, UK
- Prof. Dr. Hany Ammar, West Virginia University, USA
- Prof. Dr. Izzelddin Mohammed Osman, Sudan University of Science and Technology, Sudan
- Prof. Dr. R.Badlishah Ahmad, Universiti Malaysia Perlis, Malaysia
- Prof. Dr. Rosalina Abdul Salam, Universiti Sains Islam Malaysia, Malaysia
- Prof. Dr. Saeed Saleh Alghamedi, Albaha university, Saudi Arabia
- Prof. Dr. Zawiyah Mohammad Yusof, Universiti Kebangsaan Malaysia, Malaysia

#### **Local Committee**

Aatef Abdullah Alnsor, Head of Engineering Faculty Abdulsalam Qseem Abidat, Faculty of Information Technology Ja'fer "Muhammed Ali" Ababna, Faculty of Information Technology Abdulrahman Ahmad Alkharabsha, Faculty of Information Technology Salahuldeen Abdullah Alabadi, Manager of Public Relations Department Muhammed Mustafa Hanon, Manager of Services Department Hanin Muhammed Mustafa, Faculty of Engineering

#### **Technical Program Committee**

Aamir Shahzad, University Kuala Lumpur, Malaysia

Abdellah Yousfi, University of Mohamed V, Souissi-Rabat, Morocco

Abdelmajid Khelil, TU Darmstadt, Germany.

Abdelrahman Elsharif Karrar, Taibah University, Saudi Arabia

Abdeslam JAKIMI, Moulay Ismail University, Meknes, Morocco

Abdul Jaleel Kehinde Shittu. University Utara Malaysia. Malaysia

Abdul Majid, University of the Punjab, Pakistan.

Abdul Samad Mohammed, College of Business Administration, AL Kharj, KSA

AbdulSattar M. khidhir, Mosul Technical Institute, Iraq.

Ahmad Alaidaroos, Alahgaff University, Republic of Yemen

Ahmad Almassaad, King Saud University, Saudi Arabia

Ahmad Kamil B Mahmood, Universiti Teknologi Petronas, Malaysia

Ahmed Ferchichi, University of Jendouba et University of Tunis, Tunisia

Ahmed Khorsi, University Al-Imam Mohamed Ibn Saud Islamic University, Saudi Arabia

Ahmed M. Zeki, Bahrain University, Bahrain.

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

Alaa El-Dine Ali Hamouda, Al-Azhar University, Egypt

Alfian Abdul Halin, Universiti Putra Malaysia, Malaysia

Ali A. Alwan, International Islamic University Malaysia, Malaysia

Ali Mohammed Al-Sharafi, Sana'a University, Yemen

Ali Zuhdi Shaqour, College of Educational Sciences, An Najah National University, Palestine

Almoataz B. Al-Said, Cairo University, Egypt

Amar Fettane. International Islamic University Malaysia. Malaysia

Amir Abouhamzeh, University of New Brunswick, Canada

Amir Ngah, Universiti Malaysia Terengganu, Malaysia

Amir Rizaan Rahiman, Universiti Putra Malaysia, Malaysia

Amirrudin Kamsin, University Malaya, Malaysia

Amjed Ahmed, College of Imam Alkazem for Islamic Studies, Iraq

Anis Ben Aissa, National Engineering School of Tunis, University Tunis Elmanar, Tunisia

Ashwag Gadeed, Sudan University of Science and Technology (SUST), Sudan

Aslina Saad, Universiti Pendidikan Sultan Idris, Malaysia

Azham Hussain, University Utara Malaysia, Malaysia

Azwa Bin Abdul Aziz, Universiti Sultan Zainal Abidin, Malaysia

Azzeddine Mazroui, University Mohammed First Oujda, Morocco

Balsam AbdulJabbar Mustafa, University Malaysia Pahang, Malaysia

Bedine Mohamed Lemine, King Khalid University, Saudi Arabia

Choumayssa Khaloui, Algeria University, Algeria

Daud Abdul Quadir Elega, Al-Madinah International University

Dayang N. A. Jawawi, Universiti Teknologi Malaysia, Malaysia

Dayang Rohaya Bt Awang Rambli, Universiti Teknologi PETRONAS, Malaysia

Emad Subhi Mohamad Al-battah, College islam johor (marsah), Malaysia

Erne Suzila Kassim, Universiti Teknologi MARA, Malaysia

Fatma Susilawati Mohamad, Universiti Sultan Zainal Abidin, Malaysia

Fazidah Othman, University Malaya, Malaysia

Haikal El Abed, Technische Universitaet Braunschweig, Germany

Hamad Alreshidi, University of Hail, Saudi Arabia

Hamid Ali Abed Alasadi, Basra University, Iraq

Hamid Saghir Saad Al-Raimi, Hodidah University, Republic of Yemen

Hammad Afzal, University of Sciences and Technology, Pakistan

Hanady Ahmed, Qatar University, Qatar

Hani Mohammed Alzaid, King Abdulaziz City for Science and Technology, Saudi Arabia

Hany Soliman Alnashar, Cairo High Inst. for engineering and Computer Sience

Hasan Y. Kamal, University of Bahrain, Bahrain

Hashem Saeid Ebrahim Elsharnoby, Al-Azhar University in Cairo

Hazura Zulzalil, Universiti Putra Malaysia, Malaysia

Husnayati Hussin, International Islamic University Malaysia, Malaysia

Ibrahim Bounhas, La Manouba University, Tunisia

Ibrahim Suliman Ahmed Ashmaiq, International Islamic University Malaysia, Malaysia

Imad Fakhri Al-Shaikhly, International Islamic University Malaysia, Malaysia

Ishfaq Ahmed, University of the Punjab, Pakistan

ismaiel houmed, Police College, Yemen

Jalal Chebli, International Islamic University Malaysia, Malaysia

Jamil Itmazi, Palestine Ahliya University, Palestine

Jeril Kuriakose, Manipal University Jaipur, India

Kamarudin bin Sa'adan, Universiti Sains Islam Malaysia, Malaysia

Kamisah Osman, The National University of Malaysia

Kawther A. Aldhlan, University of Hail, Saudi Arabia

Khader musbah ismail, King Khalid University, Saudi Arabia

Khalid Shaker Jasim, University Malaya, Malaysia

Khir-eddine sib, University of Tlemcen, Algeria

Maha Sayel Abdelhaq, Universiti Kebangsaan Malaysia, Malaysia

Maher JAOUA, Faculty of economic sciences and management of sfax, Tunisia

Maizan binti Mat Amin, Universiti Sultan Zainal Abidin (UniSZA), Malaysia

Majid Almaraashi, Um Alqura University, Makkah, Saudi Arabia

Mamoun Jamous, Universiti Teknologi Malaysia, Malaysia

Mark M. Yassa, Cairo University, Egypt

Marzanah A. Jabar, Universiti Putra Malaysia, Malaysia

Mohamad Naser, Taif University, Saudi Arabia

Mohamad Nizam Ayub, University Malaya, Malaysia

Mohamed Elkatry, Al-Madinah International University

Mohamed Mohamed Said Ahmad Amer, El Azhar University, Egypt

Mohamed Tahar Ben Othman, Qassim University, Saudi Arabia

Mohammad Hussein, University Malaya, Malaysia

Mohammad Said Desouki, Higher Institute of Applied Science and Technology, Syria

Mohammed AbouBakr Elashiri, Beni sujef University, Egypt

Mohammed Abual-Rub, Imam Mohammad Ibn Saud Islamic University, Saudi Arabia

Mohammed M. Allehaibi, Umm Algura University, Saudi Arabia

Mohd Faizal Abdollah, University Technical Malaysia Melaka, Malaysia

Mohd Zalisham bin Jali, Universiti Sains Islam Malaysia, Malaysia

Monir Abdullah Abduh Algubati, Thamar University, Yemen

Mostafa Mahmoud, Islamic University of Madinah, KSA

Mourad MARS, University of Monastir, Tunisia

Muhammad Naufal Bin Mansor, University Malaysia Perlis, Malaysia

Mumtazimah Mohamad, Universiti Sultan Zainal Abidin, Malaysia

Musaab Abdalla Hassan, Sudan University of Science and Technology, Sudan

Nesrin Mohamad, Suez Canal University, Egypt

Nor Hasbiah Ubaidullah, Universiti Pendidikan Sultan Idris, Malaysia

Norisma Idris, University Malaya, Malaysia

Norkhaiani Abdul Rawi, Universiti Sultan Zainal Abidin, Malaysia

Nour-Eldin M. Elshaiekh, Future University, Sudan

Omar Tayan, Taibah University, Saudi Arabia.

Raja Jamilah Bt Raja Yusof, Centre of Qur'anic Research, University Malaya, Malaysia

Rashid A. Saeed, Sudan University of Science and Technology (SUST), Khartoum, Sudan

Refaat Hassan Mohammed Al-Zanfally, Taibah University, Saudi Arabia,

Ridha Khedri, McMaster University, Canada

Rohaya Latip, Najran University, Saudi Arabia

Rokeia Boussenane, Emir Abdelkader University of Islamic Sciences, Algeria

Rosilah Hassan, Universiti Kebangsaan Malaysia, Malaysia

Rozi Nor Haizan binti Nor, Universiti Putra Malaysia, Malaysia

Sa'adah Hassan, Universiti Putra Malaysia, Malaysia

Sabrina Tiun, Universiti Kebangsaan Malaysia, Malaysia

Salaheddin J Juneidi, Palestine Technical University Colleges / Aroub

Salahudheen Kottaril, Darul Huda Islamic University, India

Salimah Mokhtar, University of Malaya, Malaysia

Salman Firdaus Sidek, Universiti Pendidikan Sultan Idris, Malaysia

Salwa Hamade, Electronics Research Institute, Egypt

Samah Lotfi Mohamed, King Faisal University, Saudi Arabia

Samah Mohamed lotfy Mohamed, Suez Canal University, Egypt

Sazilah binti Salam, Universiti Teknikal Malaysia Melaka, Malaysia

Seddeq Ghrare, University of Aljabal Algharbi, Libya

Sharifah Md Yasin, Universiti Putra Malaysia, Malaysia

Shihab A. Hamid, International Islamic University Malaysia, Malaysia

Shumsudin Yabi, Universiti Sains Islam Malaysia

Siti Hafizah Ab Hamid, University of Malaya, Malaysia

Siti Norul Huda Sheikh Abdullah, Universiti Kebangsaan Malaysia.

Sufiana Khatoon Malik, National University of Modern Languages (NUML) Islamabad, Pakistan

Syarilla Iryani Ahmad Saany, Universiti Sultan Zainal Abidin, Kuala Terengganu, MALAYSIA

Talaat Wahby, Sudan University of Science and Technology, Sudan

Teh Noranis Mohd Aris, University Putra Malaysia, Malaysia

Tesfaheywet Zeryehun, Haramaya University, Ethiopia

Thabet Slimani, Taif University, Saudi Arabia

Wahiba Ben Abdessalem Karâa, Higher Institute of Management of Tunis, Tunisia

Wan Nor Amalina binti Wan Hariri, Universiti Teknologi MARA, Malaysia

Wan Nurhayati Wan Ab. Rahman, Universiti Putra Malaysia, Malaysia

Yahia Abdalla Hamad, Sudan University of Science and Technology (SUST), Khartoum, Sudan

Yahya O Mohamed Elhadj, AL Imam Muhammad Ibn Saud University, Saudi Arabia

Yasser Alginahi, Taibah University, Saudi Arabia

Yousef Ibrahim Daradkeh, Salman bin Abdulaziz University, KSA

Youssef Iraqi, Khalifa University, UAE

Youssef Zaz, Abdelmalek Essaadi University, Tetouan, Morocco.

Yuzita Yaacob, Universiti Kebangsaan Malaysia, Malaysia

Zarinah Mohd Kasirun, University of Malaya, Malaysia

Zuriati Ahmad Zukarnain, Universiti Putra Malaysia, Malaysia

Zurina Muda, Universiti Kebangsaan Malaysia, Malaysia

# Countries of Participations

# دول المشاركين

Country	गंग
Algeria	الجزائر
Bangladesh	بنغلاديش
Canada	كندا
Egypt	הסת
France	فرنسا
India	الهند
Indonesia	اندنوسيا
Iran	ايران
Iraq	العراق
Jordan	וערני
Lebanon	أبنان
Malaysia	ماليزبا
Morocco	المغرب
Nigeria	نيجيريا
Oman	عمان
Pakistan	باكستان
Palestine	فلسطين
Qatar	قطر
Saudi Arabia	المملكة العربية السعودية
Sudan	السو دان
Tunisia	تونس
United Arab Emirates	الإمارات
United Kingdom	بريطانيا
United States	امریکا
Yemen	اليمن

# Forward



By the grace of Allah, it is a great pleasure to introduce the program of the second International Conference on Islamic Applications in Computer Science and Technology After the success of the first conference held in Kuala Lumpur on 1-2 July 2012, this conference will extend over two days 12-13 October 2014, and is held in Amman, Jordan. The program shall include over 50 papers both in Arabic and English languages. The authors of these papers come from Algeria, Iran, Iraq, Jordan, Malaysia, Morocco, Nigeria, Saudi Arabia, Sudan, United Kingdom and United States. With the meeting of researchers interested in Islamic Applications on Computer Science and Technology from all these countries, we hope that exchange of ideas and knowing each other will result in further enhancement of research in this growing and important field for the service of Islam and computer science and technology as well. May Allah give his guidance and grace to all those who shared in organizing and contributing to this conference.

Professor Mohammed Zeki Khedher General Chair

# تقديم

#### الحمد لله والصلاة والسلام على رسول الله وعلى آله وصحبه ومن والاه.

إنه من داعي الغبطة والسرور أن نقدم هذا الكتيب بين يدي المؤتمر الثاتي للتطبيقات الإسلامية في علوم الحاسوب وتقتياته الذي ينعقد بين 12-13 تشرين الأول /أكتوبر 2014 في رحاب الجامعة الإسلامية العالمية في عمان – الأردن وذلك بعد النجاح الذي حققه المؤتمر الأول الذي عقد في 1-2 تموز 2013 في كوالمبور بماليزيا. يتضمن برنامج المؤتمر تقديم أكثر من 50 بحثًا علميًا باللغتين العربية والإنكليزية. وتتوزع البلدان التي ينتمي لها الباحثون الذين قدموا أبحاثهم للمؤتمر إلى عدد كبير من البلدان يشمل الجزائر والعراق وايران والأردن وماليزيا والمغرب والمملكة العربية السعودية والسودان وبريطانيا والولايات المتحدة. إن لقاء هذا العدد الكبير من الباحثين المهتمين بالدراسات الاسلامية وتطبيقاتها في علوم الحاسوب وتقنياته من كل هذه الأقطار نأمل أن يساعد في تبادل الخبرات والتعارف فيما بينهم لإقامة علاقات علمية مشتركة والتواصل في المستقبل في هذا الحقل الهام لخدمة الإسلام وعلوم الحاسوب وتقنياته في الوقت نفسه. ندعو الله أن يوفق كل من ساهم في إنجاح هذا المؤتمر وكافة الذين قدموا أبحاثهم له وأن يكلل المساعي في خدمة الإسلام والم والله والله ولى التوفيق

 أ.د. محمد زكي خضر رئيس المؤتمر

# Keynote Speech الكلمات المفتاحية

# Keynote Speaker 1

# Prof. Dr. Zaghloul El-Naggar

 A Muslim scholar and Chairman of Committee of Scientific Notions in the Qur'an, Supreme Council of Islamic Affairs, Cairo, Egypt



#### Topic: Makkah, the mother of all cities

**Abstract**: After long debates that exhausted many scientists, it was proven that the earth was completely immersed with water in a certain phase of its creation, and that there was no dry land exposed above the surface of that water. Then by the will of Allah, the bottom of this huge ocean exploded into violent volcanic eruptions that kept on continuously throwing molten lava. The lava accumulated in layers over layers causing a mountain range to form on the bottom of this huge ocean. This mountain range continued to grow and mount until its peak emerged out of the water's surface forming the first part of dry land. The volcanic activity continued, and this island grew gradually as a result of the successive volcanic eruptions that added new areas to it to become a great continent. After that it started to break up and rip apart by Allah's will and eventually fragmented into the seven continents seen now on earth's surface. Fourteen hundred years ago, it was related from Prophet Muhammad (peace be upon him) that he said: "The Ka'ba emerged from beneath the water, and then land formed around it." This hadith is supported by another Hadith narrated by Ibn Omar: "It (the Sanctified House) was the first thing to come out over the surface of the water in the time of creating the heavens and the earth as a block, then land formed from beneath it". This indicates that Makkah is located in the middle of Earth's mainland. Also, the land beneath the Noble Ka'ba is considered as the oldest piece of the solid rocky surface of the earth. However, no one tried to prove such a fact until now. Muslim scientists should prove this by specifying the general age of rocks around the Ka'ba through the radioactive elements they contain (i.e. Carbon-14), in order to present this evidence to all people.

# المتحدث الاول

# الاستاذ الدكتور زغلول النجار

الداعية الاسلامي ورئيس لجنة الإعجاز العلمي في القرآن الكريم، المجلس الأعلى للشؤون الإسلامية، القاهرة،
 مصر

# العنوان : مكة، أم القري

الخلاصه :بعد نقاشات وحوارات طويلة اضنت الكثير من العلماء، تم إثبات أن الأرض كانت مغمورة بالماء بشكل كامل في احدى مراحل تكوينها قبل أن تصبح على الشكل الذي عليه اليوم. وعلى هذا فإنه لم تكن هناك أرض يابسة ظاهرة فوق سطح الماء. ثم وبمشيئة الله سبحانه وتعالى، فقد أصاب باطن هذا المحيط الضخم هيجان وانفجارات بركانية عنيفة أخذت تلقي بحممها المنصهرة بشكل مستمر. وأخذت هذه الحمم تتزاكم طبقة فوق طبقة لتشكل سلسلة جبال في قاع هذا المحيط الهائل. استمرت هذه السلسلة الجبلية بالنمو والارتفاع الى أن تجاوزت قمتها سطح الماء لتشكل أول جزء من الأرض اليابسة. وباستمرار النشاط البركاني، أخذت هذه الجزيرة بالنمو تدريجيا بفعل الحمم البركانية المتعاقبة لتضيف لها مساحات جديدة ولتصبح قارة كبيرة. بعد ذلك أخذت هذه القطعة الكبيرة من اليابسة بالتكسر والتصدع الى كثل كبيرة بمشيئة الله تعالى، وفي نهاية المطاف تشكلت القارات السبع التي نزاها اليوم على سطح الارض.قبل ألف واربعمائة سنة، روي عن النبي محمد (صلى الله عليه وسلم) أنه قال: "كانت الكعبة خشعة على الماء فدحيت منها الأرض" (و "الخشعة" أكمة لاطئة بالأرض، والجمع: خشع). وهذا الحديث يدعمه ما رواه ابن عمر (رضي الله عنهما) موقوفا: " أنه . أي البيت الحرام . كان أول ما ظهر على وجه الماء عند خلق السماوات والأرض زبدة . بفتح الزاي، أي كثلة من الزبد . بيضاء فدحيت الأرض من تحته". هذا يوكد أن مكة المكرمة تتوسط اليابسة. كما يحمل معنى أن اليابسة تحت الكعبة المشرفة تعتبر أقدم جزء من الغلاف الصخري للأرض على الإطلاق. وهو ما لم يحاول أحد إثباته بعد. وعلى علماء المسلمين أن يتحققوا من ذلك بتحديد العمر المطلق للصخور القائمة حول الكعبة المشرفة بواسطة العناصر المشعة الموجودة فيها حتى يمكن تقديم هذا الدليل إلى الناس جميعا.

# Keynote Speaker 2

# Prof. Dr. Kharchaf Idris

 Professor of Higher Education in Mathematical Statistics and Data Mining, University of Mohammed V, Rabat,



**Topic:** Data mining and Database Analysis using Data Mapping Model: Prophetic Letters to Heads of States

**Abstract:** This research focuses on Data Mining technique in order to get new knowledge found in the huge amount of infinite information that is stored in the Mohammadian School (School of Applied skills for the Quranic School) by converting the Prophet School texts into map tree according to their order (Figure 1). This map tree is based in a mechanism way upon building a set of mathematical algorithms and informatics methods whose purpose is to clarify and understand the knowledge and miracles that make up the various generators of the Prophet School.

# المتحدث الثاني

# الاستاذ الدكتور إدريس الخرشاف

- أستاذ التعليم العالى في الإحصائيات المعلوماتية والخريطة الشجرية،
  - جامعة محمد الخامس، الرباط، المغرب

**العنوان**: التنقيب في المعلومات وتحليل البيانات باستخدام الخريطة الشجرية الرياضية: الرسائل النبوية المرسلة لملوك ورؤساء الدول أنموذجا

الخلاصه: يرتكز هذا البحث على تقنية التنقيب عن البيانات (Data Mining) ، من أجل الحصول على معارف جديدة، موجودة في الكمية الضخمة اللامتناهية من المعلومات التي تمّ تخزينها في المدرسة المحمدية (مدرسة المهارات التطبيقية للمدرسة القرآنية)، وذلك بتحويل نصوص المدرسة النبوية إلى خريطة شجرية تراتبية، ترتكز بطريقة آلية على بناء مجموعة من الخوارزميات الرياضية والطرق المعلوماتية، من أجل توضيح وفهم المعارف والمعجزات التي تشكّل مختلف مولّدات المدرسة. وما يهمنا في هذا البحث بناء خريطة معلوماتية رياضية، للرسائل النبوية المرسلة لملوك ورؤساء الدول (كأنموذج تطبيقي)، وبناء شجرة المعرفة الترتيبية (Data Maping) للرسائل، حتى نتمكّن من فهم التخطيط الاستراتيجي المتبّع عند رسول الله صلى الله عليه وسلّم، انطلاقا من الرسائل المذكورة، والتعرّف على محتواها، وكذلك على الرابطة الموجودة بين مختلف الرسائل بطريقة آلية، والتي لم يعرفها التاريخ العلمي إلى حدود كتابة هذه الأسطر. كل ذلك يتمّ عن طريق استخدام تقنيات التحليل المعاملي للتقابلات المتعدّد الأبعاد المرتبط بدراسة وتصنيف الرسائل النبوية المرسلة لملوك ورؤساء الدول – بعد صلح الحديبية المصداقية العلمية، لم نقتصر في دراستنا على الجانب النظري المرتبط بالنماذج ورؤساء الدول – بعد صلح الحديبية تعتمد على المعلوميات وتقنيات التصنيف الشجري التصاعدي Automatic)، والتحليل المعاملي للتقابلات المتعدّد الأبعاد (AFCM) في المجموعة اللهرب نباء الخريطة الشجرية.

# Keynote Speaker 3

## Assoc. Prof. Dr. Mohamad Fauzan Bin Noordin

- Associate Prof. at Department of Information Systems, Kulliyyah of Information and Communication Technology, International Islamic University Malaysia.
- Head of Knowledge and Wisdom Technology Research Cluster.
- Chairman of the Research Group on Islamic Knowledge Technology.



### Topic: Social Media and Advertising from Maqasid al-Syari'ah Perspective

**Abstract:** Social media advertising (SMA) or social media marketing (SMM) is the distribution and sharing of content, information, offers and promotions to market companies, brands, products or services online via the internet by using social media profiles and networks for the purpose of building awareness, improving search authority, and driving sales leads or ecommerce. It also can be interpreted as the act of using social networks, online communities, blogs, wikis or any other collaborative Internet form of media for marketing, sales, public relations and customer service. Common social media marketing tools include Twitter, blogs, LinkedIn, Facebook, Flickr and YouTube. Advertising industry today somehow far away from the concept of Tawhidic paradigm in their practices. The element of people ware (heartware) is important to control the input and output for ourselves. Maqasid al-shari'ah is the solution to acknowledge Allah SWT as the supreme Lord (al-Khaliq) and ensure the advertising contents and practices are syariah compliant.

#### المتحدث الثالث

# الاستاذ المشارك الدكتور محمد فوزان بن نور الدين

- استاذ مشارك في قسم نظم المعلومات، كلية تقنية المعلومات والاتصالات، الجامعة الإسلامية العالمية في ماليزيا
  - رئيس الكتلة البحثية لتقنية المعرفة والحكمة
  - رئيس المجموعة البحثية لتقنية المعرفة الإسلامية

العنوان: الإعلام الإجتماعي وصناعة الإعلانات من منظور مقاصد الشريعة

الخلاصه: إن خدمات وسائل التواصل الاجتماعي أو تسويق وسائل التواصل الاجتماعي تتضمن توزيع محتويات ومعلومات وعروض وإعلانات للشركات التجارية وللبضائع وللخدمات وللعلامات التجارية عن طريق الانترنت، وذلك باستخدام مواقع شبكات التواصل الاجتماعي لغرض تتمية الوعي وتحسين إمكانيات البحث وإدارة المبيعات والتجمعات الإلكترونية. ويمكن تمثيلها ايضا بأنها عملية استخدام الشبكات الإجتماعية والمجاميع على الانترنت والمدونات والتجمعات التعاونية واي شكل آخر من أشكال التواصل التعاوني على الانترنت لأجل تسويق المبيعات وخدمة العملاء والعلاقات العامة. من الوسائل الشائعة للتسويق على التواصل الاجتماعي: تويتر، ولينكدان، وفيسبوك، وفليكر، ويوتيوب، والمدونات. إن مراكز صناعة التواصل والاعلام الاجتماعي هذه الأيام بعيدة بممارساتها عما يتطلبه مفهوم العبودية لله سبحانه وتعالى وتوحيده. فالمكون الإنساني (المكون القلبي) مهم جدا في التحكم بمدخلات ومخرجات النفس البشرية. إن تحقيق مقاصد الشريعة هو الحل لتحقيق العبودية والايقان بأن الله سبحانه وتعالى هو الرب المتعالي (الخالق)، ولغرض ذلك ينبغي أن تكون الفعاليات على وسائل التواصل والمحتويات الإعلانية بما يتوافق مع الشريعة الإسلامية.

# Keynote Speaker 4

# Dr. Omar Tayan

- Head of Unit of Information Security for the Holy Quran and Its Sciences, IT Research Center for the Holy Quran and Its Sciences (NOOR), Al-Madinah Al-Munawwarah, Saudi Arabia.
- Member of the IEEE and IEEE-Computer Society.



**Topic:** State-of-the-Art Multimedia Information Assurance Techniques and Issues for e-Quran ande-Hadith Learning and Propagation: A Vision

**Abstract:** As individuals, organizations and governments continue spending enormous efforts to have an impact and fingerprint in the digital-world by accelerating online multimedia resources to propagate thoughts, so too should the Quran and Prophetic-Hadith be propagated efficiently and accurately in all multimedia formats using the most up-to-date technologies for maximizing accessibility and readership to Muslims and non-Muslims. This presentation shall discuss the latest multimedia techniques with reference to the latest state-of-the-art (including for text, image and audio media) for e-Quran and e-Hadith dissemination and some significant issues that arise with such techniques. Furthermore, this talk shall shed light on development efforts of two new innovations underway and its expected large-positive impact on society.

# المتحدث الرابع

# الدكتور عمر طيان

- رئيس وحدة أمن معلومات القرآن الكريم وعلومه، في مركز أبحاث تقنية المعلومات لخدمة القرآن الكريم نور جامعة طيبة، المدينة المنورة، المملكة العربية السعودية
  - عضو اللجنة التأسيسة لمركز أبحاث تقنية المعلومات أعلاه
  - عضو في جمعية مهندسي الكهرباء والإلكترونيات و عضو في جمعية الحاسبات

العنوان: رؤية عن تقنيات الحداثة لأمن المعلومات في إستخدام الوسائط المتعددة للتعليم الإلكتروني للقرآن الكريم وعلومه

االخلاصه: يستمر الأفراد والمنظمات والحكومات في بذل الجهود الواسعة لكي يكون لها تأثير وبصمة في العالم الرقمي من خلال زيادة موارد الوسائط المتعددة على الإنترنت لكي تتشر أفكارها والمعلومات المزودة من قبلها. وفي الوقت نفسه هناك حاجة ماسة لتقديم القرآن الكريم والحديث النبوي بكفاءة ودقة بمختلف الوسائل باستخدام الوسائط المتعددة وبمختلف التقنيات بحيث تحقق أقصى قدر من سهولة الوصول للقراء المسلمين وغير المسلمين. بالإضافة إلى ذلك فإن هذا العرض سيناقش أحدث تقنيات الوسائط المتعددة (بما في ذلك النص والصورة والصوت في وسائل التواصل) للنشر والتعليم الإلكتروني للقرآن الكريم والحديث النبوي كما سيناقش بعض القضايا الهامة التي تتشأ عن استعمال هذه التقنيات . كما سيحاول هذا العرض إلقاء الضوء على المجتمع.

# Accepted Papers in English

# الأبحاث المقبولة باللغة الانجليزية

#### Paper ID 2

## Alfanous, Open Source Quran Search Engine API

Assem Chelli, Taha Zerrouki Amar Balla National Higher School Of Computer Science, ESI, Algiers, Algeria

Abstract: Alfanous is a functional, dynamic, comprehensive Qur'an search engine that has been effectively designed to carry out simple or advanced Quranic searches. Alfanous uses a contemporary, highly developed approach to retrieve vital information, enabling stable efficient, speedy searches to be conducted. Alfanous aims to implement additional features such as highlight, site suggestions, scoring...etc to further improve your search experience. Alfanous understands the complex nature of the Arabic language and thus offers effective Arabic language processing, allowing the stemming and successful elimination of ambiguities. The Application Programming Interface can be used as a fundamental base for developers to build and enhance interface types within different systems, ex: Desktop GUI, Web-based UI, Smart phones, Social networks...etc.

#### Paper ID 10

#### **Wisdom Box Game**

Taha Basheer Taha <sup>A</sup> ,Ola Mahmoud Soubra <sup>B</sup>

Assistant Lecturer in Computer Science Department\ Cihan University \ Erbil \ Iraq

B Computer Science Department \ Ipnet Institute \ Beirut \ Lebanon

Abstract With the rapid spread of Mobile devices applications among people, specially youth and teenagers, many researches proved the mental effect of these applications on their users and on their way in behave. Since Games are the most common types of these applications, developing games with Islamic, moral and educational principles becomes very essential issue especially in Middle East societies. Wisdom Box, is a two dimensional game with Islamic and purposive concepts. It combines puzzles and adventures games, since first levels are designed as set of columns each two moves together up and down; the player must arrange the columns in a way that lead him to the box. In advanced levels, when Adam becomes closer to the Enemy, more troubles appeared; as fire balls, thorns or enemy wild hat, which give the game more difficulties and exciting. The game developed using impactJS application, with Java Script language and game graphics is designed by Poser software.

# **Semantically Answering Questions from the Holy Quran**

Samir Tartitr<sup>a</sup>, Hashem Shmeisani<sup>b</sup>, Ammar Al-Na'ssaan<sup>c</sup>, Moath Naji<sup>d</sup>

Abstract: Arabic is the first or second language to more than a billion human beings. A majority of Arabs are Muslims who consider the Holy Quran as the word of God and the main source of guidance and rules. In Arabic language we are still in the phase of syntax-based search, where the retrieved results are still based on the exact words the user enters. Very few approaches have been developed to move beyond that, but most of the works are not general enough to serve the majority of Arabic speakers who are attempting to find information in the Quran. Question answering is the process of retrieving answers to questions users post in a natural language. In this paper, we use semantic approaches to represent Quranic content and interpret user questions written in Arabic, and to try to find the best answer to questions from the semantic representation of the Quran. We achieved a usable model that can answer questions from the Quran even if the exact words the user entered are not present in the Quran. We implemented a prototype of our approach and the results we present later in the paper are very encouraging.

#### Paper ID 19

# "Ahkam" retrieval and elicitation using Information Technology: Semantic Web Ontology searching engine

Salaheddin J. Juneidi

**Abstract:** The civilization, heritage and Sharia of Islam are very prosperous and abundant, we can see that in terms of huge numbers books, manuscript, documented sayings and credited stories about prophet Mohamed and his family and companions. Our respectful Imams and scholars have documented great amount using hand writing and printings in books that are taking as references till now a days. technology is appear the best solution to preserve this enormous Data amount, basically technology come as the best solution to serve Hadith, Sunnah, heritage and civilization.

# Conceptual Hadith Warehouse based on intelligent Broker and Smart WiKi Architecture

Amjed Ahmed

**Abstract:** Internet and web platforms nowadays provide massive information resources through which information and knowledge can be retrieved for a wide spectrum of subjects. The biggest challenge that faces researchers with this huge number of resources is the unbearable time, efforts and knowledge required to survey it all, thus an electronic assistant is required. This paper is dedicated to investigate and build infrastructure and platform architecture to warehouse Hadith of prophet Mohammed (PBUH) in a Smart Wiki Style, and introduce special intelligent broker which is responsible on providing semantic information revealed from the wiki as a response to researcher query. A special mediator is also introduced by this paper to collect information from heterogeneous information resources (i.e., web pages in this approach), and inject it into the smart wiki to enrich the knowledge contents of the warehouse.

#### Paper ID 22

## The Qur'an and Theories of the Universe

Zafar Ahsan Aligarh Muslim University

**Abstract :** The truth and exact knowledge involved in any process of creation is just the definition of science; and this knowledge is gained by observation (tafakkur) and experiment (tadabbur). Moreover, science compels scientists to admit to the essential need of a Supreme Creator and that is why knowledge shall be propagated in the spirit of Tawhid, which leads towards the recognition of Allah as the Absolute Creator and Master of mankind. In this paper, with the help of the verses from The Qur'an, we shall discuss about the creation of the Universe. We shall also discuss that is there any compatibility between The Qur'anic view of the Universe and the scientific view of the Universe and is there any thing which is common to both of these views?

# Speech Recognition Incorporation in a Multiple Input Modality Mobile Application for Pilgrims (MDZ4H)

Ahmed Al-Aidaroos, Ariffin Abdul Mutalib and Abdul Nasir Zulkifli School of Computer Science and Engineering, Al-Ahgaff University, Yemen School of Multimedia, Universiti Utara Malaysia (UUM), Malaysia

Abstract: Hajj consists of several rituals, which require the pilgrims to recite specific dua and zikr for each of them. Since there are so many dua and zikr involved, pilgrims who are not well versed in Arabic have difficulties to memorize them. This paper discusses the incorporation of voice recognition in an application that helps pilgrims to recite dua and zikr while performing all Hajj rituals, called Mobile Doa and Zikir for Hajj (MDZ4H). Android platform has been chosen due to the dramatic increased in the Android mobile phone users worldwide. MDZ4H displays the Arabic text, the translation in Malay and also the Arabic audio files of the dua and zikr, which has been gathered, compiled, and verified before the application could be developed using J2ME. After that it has been evaluated by experts. The findings show some of the limitations of incorporation the Google speech to text function and suggest the solutions and the future work. It is hoped that the developed application could be made available in order to help Hajj pilgrims to easily and conveniently recite the dua and zikr towards achieving Hajj Mabrur.

#### Paper ID 25

# A Web Based Management System for Hafazan Al-Quran

Amir Ngah, Fakhrul Adli Mohd Zaki, Muhammad Fadlan Ishak Universiti Malaysia Terengganu

Abstract: Hafazan Al-Quran Management System is a web based system, which is developed to assist the Tahfiz School in managing the student's memorizing information of the Quran. The system is specifically developed for the Imtiaz Secondary School which is one of the elite Islamic religious schools in Terengganu, Malaysia. This system has three (3) main modules which are based on the number of user types of the system. There are Coordinator Module, Teacher Module and Parent Module. Through this system, the coordinator can easily manage the hafazan information of their students. Moreover, the system enables to produce a number of reports or statistics related to student's memorizing information which is significant to all users of the system. Although the system is specifically developed for the mentioned school, the way the system was developed can generally be used for any types of Tahfiz School.

# Building a Virtual Union Catalogue for Arabic Journal Articles in Malaysian Libraries Using Open Source Solutions Abdul Kabir Hussain Solihu<sup>1,a</sup>, Yushiana Mansor<sup>2,b</sup>, Normi Sham Awang Abu Bakar<sup>3,c</sup>, Mohd.

Abdul Kabir Hussain Solihu<sup>1,a</sup>, Yushiana Mansor<sup>2,b</sup>, Normi Sham Awang Abu Bakar<sup>3,c</sup>, Mohd. Feham Bin Md. Ghalib<sup>4,d</sup>, Mohammed Al Haek<sup>3,e</sup>
International Islamic University Malaysia

**Abstract:** A considerable number of Malaysian libraries are housing Arabic collections to support the needs of their users. Currently, there is no bibliographical database of scholarly articles published in Arabic periodicals available in Malaysian libraries. To know what is published in Arabic periodicals a researcher has to check these voluminous journals manually from one library to another. This has created great difficulties for researchers and consequently impaired the quality of their publications in Arabic The aim of this paper is to discuss the ongoing research project at the International Islamic University Malaysia (IIUM) to create a virtual union catalogue for collections of Arabic journal articles. The project, tagged "My Index Arabicus" (Malaysian Index Arabicus), was designed to develop a single search platform to retrieve the bibliographic records of Arabic articles indexed from selected Arabic journals available in five Malaysian university libraries. Using DSpace open source digital library software with the Dublin Core metadata standard, the collected materials are synchronized into a single database searchable by different access points, and accessible online to all users of Malaysian academic libraries. A total of 1,000 records are currently hosted in the system. It is estimated that the system will host more than 10,000 records by the end of the project. Experience from the project has shed light on technical knowledge and skills in computing, cataloguing of Arabic articles, and institutional infrastructure.

#### Paper ID 27

# Islamic and Quranic information on the Web: Information Retrieval challenges and user's preferences

Rita Zaharah Wan-Chik Malaysian Institute of Information Technology, Universiti Kuala Lumpur

Abstract: This research studies the user's experience in searching for Islamic and Quranic information on the Web, particularly on their preferences and challenges. The goal is to understand the information needs of this particular type of information user, their information assessment strategies and what kind of obstacles they have to face. Thirty one interviews were given to various groups of online users regarding their search processes when acquiring Islamic, particularly those of Quranic-related, information on the Web. They were also asked to discuss on other information search-related concerns. Interview data were transcribed and then analysed inductively to identify emergent themes using inductive content analysis. The data analysis focused on extracting common themes, patterns and concepts from the transcripts that were coded by categories that emerged as the process continued. The participants have discussed the criteria of their preferred sources for Islamic and Quranic information on the Web. The participants agree that it was a challenge in retrieving credible information, or selecting and differentiating between the good and the bad search results.

The participants also mentioned the need to have prior knowledge on Islam or the Quran to help retrieve better results especially when searching for Hadith. Some other recommendations to help improve the retrieval process were discussed and recommendations for information providers on producing credible information on the Web were also discussed. The findings provide important insights on user's search experience when seeking for Islamic and Quranic information on the Web. It can serve to give Web designers and content providers on what the users are actually searching for to better adjust their services according to the needs of end users. The findings could also help the public search engines on improving its systems to help users retrieve better results in the future on Islamic and Quranic information on the Web.

#### Paper ID 29

# An Incremental Knowledge Base dedicated to Muslim Worship

Ahlem Benchennaf, Dalila Boughaci, Messaoud Boudehane and Nadir Messaadia FEI- department of computer science - LRIA University of Sciences and Technologies USTHB

**Abstract:** The conceptual graph is a universal formalism for knowledge representation where the nodes of the graph are the concepts linked by a relation of partial order. A conceptual graph can be viewed as an intermediate language permitting to translate computer-oriented formalisms to and from natural languages. The aim of this work is to develop an incremental knowledge base dedicated to Muslim worship, incorporating consistent and non-redundant information. The knowledge acquisition and the representation processing make use of the conceptual graph formalism enhanced with stamping. Further, the proposed knowledge base is extrapolated to a web application in the hope to using it for educational and teaching purposes for anyone interested in the field of Muslim worship.

#### Paper ID 32

## **Semantic Annotation of Quranic documents**

Ahmed Bali<sup>1,a</sup>, ImaneAyachiAmor<sup>1,b</sup>,Okba Kazar<sup>2,c</sup>
<sup>1</sup>Department of Mathematics and Computer Science, University of El oued, Algérie
<sup>2</sup>Department of Computer Science, University of Biskra, Algérie

**Abstract:** The semantic annotation of documents is a key step to reach the rich semantic content and also to ensure the semantic search process. However, the existing works on annotation are essentially syntactic. This problem (lack of semantic) appears much more if the documents are in Arabic; specially the case of Quranic documents. In this paper, we propose a process of semantic annotation of Quranic documents using the relationships and concepts which defined by experts in our ontology of Quran "OntoCoran". The result of this process can be exploited for semantic search Quranic documents.

# **Comparing Arabic NLP tools for Hadith Classification**

Kaouther Faidi<sup>1,a</sup>, Raja Ayed<sup>3,b</sup>, Ibrahim Bounhas<sup>1,2,c</sup>, Bilel Elayeb<sup>3,4,d</sup>

<sup>1</sup>Carthage University, Tunisia

<sup>2</sup>Manouba University, Tunisia

<sup>3</sup>Manouba University, Tunisia

<sup>4</sup>Emirates College of Technology, United Arab Emirates.

Abstract: Text classification is the process of classifying documents into a predefined set of categories based on their content. As Arabic words may have more complicated forms than many other languages, it is challenging to choose the indexing unit and to get rid of affixes. In this paper we compare the performance of different techniques for classifying Al-Hadith Al-Shareef which was analyzed with six Arabic tools (Al-Stem Darwish, Al-Stem Alex, Khoja's stemmer, Quadrigrams, Trigrams and a disambiguation tool based on AraMorph). We also compare three classification techniques implemented on WEKA toolkit; namely decision trees (DT), Naïve Bayes algorithm (NB) and SVM algorithm (Support Vector Machines). We used the TF-IDF to compute the relative frequency of each word in a particular document and the cross validation to evaluate the result of the classifiers. Experimental results show that Khoja's stemmer outperformed the other tools and that the SVM classifier achieves the highest accuracy followed by the Naïve Bayes classifier, and decisions trees classifier respectively

#### Paper ID 38

# **Employees Ethics towards Spam Email**

Yanti Rosmunie Bujang<sup>1,a</sup>, Husnayati Hussin<sup>2,b</sup>
<sup>1</sup>University Malaysia Sarawak, Sarawak, Malaysia.
<sup>2</sup> International Islamic University Malaysia,
Kuala Lumpur, Malaysia.

Abstract: Technology evolution has affected the behavior of society. When the behavior of using the Internet is imbalanced with the ethics, thus it causes a problem to the user. The problem with technology now is it has been used without ethics value. It not only happens in Malaysia, but it happens worldwide to the other country. An existing technology has made an individual getting closer and the process going faster in daily life routine. Although the technology is beneficial and useful to the society, due to lack of personal ethics many problems have arisen. As one of the most popular applications on the Internet, email also has its threat. The number of email users is increasing from day to day with the evolution of the smartphone and social networks. It creates more spam email in a mailbox because the user intends to ignore the precaution steps in avoiding malicious attack. This paper aims to highlight the fact of the employees' ethics in email application in Malaysia. A survey has been conducted to understand how the Malaysian users cope with those spam emails and the reason behind that.

# Automatic Knowledge Base Constructor for Al-Quran Retrieval System

Mohamad Fauzan Noordin1,a, Sharyar Wani2, b, Tengku Mohd T. Sembok3,c, Roslina Othman4,d 1, 2, 4 International Islamic University Malaysia, Malaysia 3 National Defence University Malaysia

**Abstract:**Web 2.0 has changed the strategy of the world. The virtual world has a large impact on the society. There is enormous data on the web but the knowledge behind the data has not been utilized even to the slightest in comparison to its size. Web 3.0 aims at knowledge extraction from the data, there is need to develop means and ways to extract the knowledge behind the data. In this area of research, Muslim researchers have directed their works towards the availability of digital resources for Al-Quran and books of Hadith since they form the foundations of Islam. However, the research done so far has not gone deep into the area of knowledge representation of Al-Quran and Hadith. The current work looks into development of knowledge representation formalism for Al-Quran using the logical base as it is expressive in nature and has proven successful previously even in complex situations. The logical base needs indexing in order for efficient retrieval as well. It would be extremely difficult to maintain the consistency of the logical base if done manually. Hence this work primarly focuses on development of a automatic knowledge base constructor. The current work has a large significance, as it will ease the process of information access to the Muslim community by using the knowledge base for retrieval mechanisms. Not only that the work will be beneficial for Non-Muslims to know more about Al-Quran easily and thus gaining more and more information about Islam

#### Paper ID 42

# An LMF-based Normalization approach of Arabic Islamic dictionaries for Arabic Word Sense Disambiguation: application on hadith Nadia Soudani<sup>1,5,a</sup>, Ibrahim Bounhas<sup>2,5,b</sup>, Bilel ElAyeb<sup>3,6,c</sup>, Yahya Slimani <sup>4,5,d</sup>

Nadia Soudani<sup>1,5,a</sup>, Ibrahim Bounhas<sup>2,5,b</sup>, Bilel ElAyeb<sup>3,6,c</sup>, Yahya Slimani<sup>4,5,d</sup>

<sup>1</sup> University of Tunis El Manar, Tunisia

<sup>2,4</sup> University of Manouba, Tunisia

<sup>3</sup> Emirates College of Technology, United Arab Emirates.

<sup>5</sup> Carthage University, Tunisia

<sup>6</sup> University of Manouba, Tunisia

**Abstract:**In this paper, we propose an approach for normalizing Arabic Dictionaries. This approach is used to transform non structured Arabic dictionaries into LMF (Lexical Markup Framework) based-normalized ones. We are basically exploiting Arabic Islamic dictionaries of hadith. An ontology will be then constructed from these normalized dictionaries. This ontology will contain explicit and formal knowledge about information in hadith. It will be used later by an information retrieval system for Word Sense Disambiguation of Arabic terms of hadith either in the formulated user query or in the texts of hadith.

# **Customizing CRM Model for Entrepreneur Loan Management**

Noor Widasuria Abu Bakar1, Shahrulniza Musa2, Zailatul Syeema Mahadi3, Tiliza Awang Mat4 Malaysian Institute of Information Technology, Universiti Kuala Lumpur, Malaysia

Abstract:MARA is a Malaysian government agency which one of its' main objectives is to nurture and support the entrepreneur. To manage and interact with them, an IT system is very much needed. A system which is based on customer relationship model (CRM) has been designed and developed. This system is designed to cater the loan contract agreement based on Islamic Banking principles such as Murabaha (sale with cost plus), Bai Al Inah (sale and buy-back), Al Ijarah (hire purchase) and Qard Hassan (good loan/benevolent loan) and Al-Kafalah (guarantee). The system also manage the request for grace period of the loan repayment and also includes the early settlement based on Ibra' Muqasah principle. The normal CRM system which is to organize, automate and synchronize sales, marketing, customer service, and technical support has been extended to cater loan management. It manages the loan start from the promotion, planning, application, approval, contract generation, monitoring and enforcement. It also facilitates the communication and interaction between the agency and the entrepreneur. The development of the system follows rapid prototyping approach where the requirements are obtained and a working prototype is developed and then shown to the user for feedback. Based on the user feedback, the system is subsequently corrected and improved.

#### Paper ID 51

## Natural Language Interface for Quran Knowledge Retrieval

Rufai Aliyu Yauri, Rabiah A.Kadir, Azreen Azman, Masrah A.A.Murad Faculty of Computer Science and Information Technology Universiti Putra Malaysia

Abstract: With the introduction of semantic Web technology, recent researches has focuses on Natural Language Interface (NLI) with the aim of using unstructured natural language query to retrieved structured RDF data. These NLI researches focuses on semantically formulating natural language query to structured query manually, semi-automatic or automatically. Most of these systems are search like systems, where user's natural language query is used to semantically formulate structured query. However, these systems rely on the presence of ontology concept in user's query in order to formulate the natural language query to structured query and fails when concept is not found in the query. This paper proposed a natural language interface system that semantically formulate user's natural language query either with presence of ontology concept in the query or otherwise. In this paper, a system-based suggestion approach is proposed as solution to semantically formulate natural language query when there is no ontology concept in the query. The system is based on using n-gram maximum likelihood estimation to automatically suggest to user possible structured query. The proposed natural language interface has improve the effectiveness retrieved result with 0.03 precision and 0.07 recall improvement.

# ELGG as an Assessment Tool in Teaching and Learning Arabic Language

Mohd Firdaus Yahaya<sup>1, a</sup>, Mohd Feham Md. Ghalib<sup>2,b</sup>

<sup>1</sup>Centre of Arabic Language Study, Universiti Sultan Zainal Abidin, Malaysia

<sup>2</sup> Arabic Language Department, International Islamic University Malaysia, Malaysia

Abstract:In line with the development of technology today, the assessment of student's knowledge and performance in higher learning institutions is not only through the summative approach but also the formative approach where evaluations are carried out consistently throughout the semester. To achieve this, several tools to assess students' knowledge are made available today, including ELGG which is the focus of this study. This is a new medium to evaluate and assess students meaningfully by tracking the students' intellectual growth and their learning experience. Furthermore, ELGG is a mediator for peer evaluation where the students' work can be reviewed by peers and the instructor. Taking this into account, this paper discusses some of the related issues on the use of e-portfolio for educational purposes and as an alternative assessment tool in learning Arabic language. Thirty students were selected to investigate the usefulness of ELGG in teaching and learning. Through ELGG, the teaching and learning process move away from the traditional approach, and invites mutual communication between the instructor and the students, and the students with their peers.

#### Paper ID 54

# Missing Pilgrims Tracking System Using GPS, GSM and Arduino Microcontroller

Zahida Parveen <sup>1, a</sup>, Dr Kawther Aldhlan <sup>2, b</sup>
<sup>1</sup> Department of Computer Science, University of Ha'il, Hail, Saudi Arabia

Abstract: This research paper proposed centralize controlling system that can help to track missing pilgrims during Hajj season by using the wide spread GPS, GPRS and Arduino UNO Microcontroller. The system under study is planned to provide the facility to pilgrims, Ministry of Hajj and the law and peace enforcement in tackling with this issue. Similar applications related to this issue were developed and can be divided into two types from the perception of the device used for location determination. Some applications are using handheld Global Positioning System (GPS) receiver and others are using mobile phones with embedded GPS receiver. This paper proposed system that is designed in such a way to deal with both solutions at the same time. This gives more agility to the system to suite diverse user categories in term of age i.e. children, young and old people with some limitations. In the proposed system the location of the pilgrim is sent instantly to the web server in the form of General Packet Radio Service (GPRS) packet through the Global System for Mobile (GSM) network on demand. The system will also provide the facility to keep a check on a missing pilgrim for regular location updates after identifying that particular pilgrim.

## **Self-Help Maqam-Based Search System**

Roslina Othman<sup>1a</sup>, Mohamad Fauzan Noordin<sup>1b</sup>, Tengku Mohd Tengku Sembok<sup>2c</sup>, Akram M Zeki <sup>1d</sup>, Emma Nuraihan Mior Ibrahim<sup>3e</sup>, Sadia Hamid Kazi1f, Siti Raudah Abdul Karim<sup>1g</sup> 1Kulliyyah of ICT, International Islamic University Malaysia 2Faculty of Science & Technology, National Defence University of Malaysia 3Faculty of Computer & Mathematical Science, MARA University of Technology, Malaysia

**Abstract:** Self-help systems developed include the pervasive mental health applying machine learning to cognitive-behavior therapy and quality criteria for self-healing systems. However, access to a system offering a self-help assessment of a person's current state (magam) with an opportunity to learn ways of improvement is not available. There is a need to offer such a system with tasawuf as the foundation and content for improvements. The system consists of texts, states of each magam, transitions, questionnaire for self-help magam analysis, and an effective user interface. Al Ghazali has written many publications including the Ihya' Ulumuddin, Tahafut al-Falasifah and Minhajul Abidin. In his Minhajul Abidin, al-Ghazali explained the seven climbings (Magam): knowledge and acquisition; repentance; obstacles; hindrances; motivation; factors that ruin worship; and praise and gratitude. To each climbing, al-Ghazali gave an account of charateristics: sound mind; self-reflection; control man's self; full trust and patience; hope and fear; free from ostentation and pride; and praise and gratitude. This research aims at establishing a preliminary work on testing the self-help magam based search system resulted from the finite state machine filled by the Seven Maqam as given in Minhajul Abidin. The objectives are: to investigate the use of finite state machine for self-help magam analysis; assess the relevancy of the texts on Tasawuf against the passing level of the desired magam; investigate the transition level set as the passing level of the magam; and make recommendation based on the evaluation of the self-help magam-based search system. The methodology includes finite state model (FSM), pre- and post questionnaires with items representing the transitions and passing levels developed in 7 different models and scales. Initial results include the prototype with all the 7 magams with 7 different models of items, retrieval of items (texts) and maqams, and relevance built upon passing levels at varying degrees.

#### Paper ID 58

# Teaching and Learning Ways Used by Prophet Mohammad P.B.U.H and Their Possible Implementation in Modern Learning Technologies

Rayan Yousif Alkhayat <sup>1,2,a</sup>, Muhammad Rafie Hj. Mohd. Arshad <sup>1,b</sup>, Esraa Khalid Alobaydi 1<sup>-2,c,</sup> Hasimah Hj. Mohamed 1,d

<sup>1</sup> Universiti Sains Malaysia, Malaysia

<sup>2</sup> University of Mosul, Iraq

**Abstract:** Prophet Mohammad P.B.U.H. adopted a distinctive approach to teach his followers and companions the basics and concepts of Islam, which comes from divine revelation; his teachings cover all aspects of life, work, living and human dealings, which are suitable everywhere and anytime. The significant of this approach in individuals learning motivate us to highlight those ways in a scientific methodology. In this paper, we have classified the ways and methods adopted by the

Prophet Muhammad P.B.U.H in the education for Muslims in general and specifically for his companions. The classification take into account the ways which proper and able to be integrated within the current learning technologies and easy to be implemented within information technology applications. Moreover, our research approach is concerned about the ways adopted by the prophet Mohammad P.B.U.H. which revolve around learner-centred and adaptive learning methods. Generally, those ways may categorized under the following key points: Directing, Mind Management, Stimulating, Gradual Approach, Induction, Psychological Effect, and Exploring.

#### Paper ID 59

## JAKIM's e-Fatwa as a New Platform of Fatwa Delivery in Malaysia

Nur Atiyah Suratem, Suraya Hamid and Noor Naemah Abdul Rahman

Abstract :From Prophet Muhammad (pbuh) period over 1,400 years ago until now, fatwa plays an essential role in Islamic law and it does remain as an important element in Islamic Jurisprudence. Fatwa that derived from the root word 'futya' is a legal opinion issued by mufti in response to solve daily matters. During the formative period of Islam, fatwa has been delivered by Muhammad (pbuh) because if there had any arising issue, people will ask the Prophet directly. In conjunction with development of technology and growth of Internet use, fatwa nowadays is being delivered through portal or website because in this modern era people tend to depend on technology to get information and to communicate with each other. In Malaysia, Jabatan Kemajuan Islam Malaysia (JAKIM, or the Department of Islamic Development Malaysia) is the main religion institution of government who is responsible to manage fatwa and other related issues on fatwa. The implementation of JAKIM's E-Fatwa by JAKIM in 2001 remarked a new episode in fatwa delivery in Malaysia. The ultimate function of the portal is to aggregate, integrate, and present information to the user according to their role and preferences; hence this paper will focus on user interface of the portal and in discussing user interface, key features act as an important element. The main purpose of this paper is to propose the idea of standard key features that should be available e-fatwa portal. The key features of e-fatwa portal are determined by integrating the two main concepts that support the implementation of an effective e-fatwa portal which are portal concept and fatwa concept. Based on the portal concept that combines design features and content features, we identify search engine; personalization; navigation; interactivity and objectivity as the proposed key features. Based on the fatwa concept that states fatwa must provide opinion basis (hujja and dalil) and reason (illah); be delivered clearly and written in a language that could be understood easily; issued by scholars who are good in Islamic law and jurisprudence and free from tribalism ('asabiyya) and imitation (taglid), we identify legitimacy and credibility as the proposed key features.

## **Teaching Dzikir Through 2D Games**

Norkhairani Abdul Rawi<sup>1,a</sup>, Maizan Mat Amin<sup>1,b</sup>, Azilawati Rozaimee<sup>1,c</sup>, Wan Malini Wan Isa<sup>1,d</sup>

<sup>1</sup>Faculty of Informatics and Computing, University of Sultan Zainal Abidin, Terengganu, Malaysia

**Abstract:**Multimedia application has been received a great attention recently. The roles played by multimedia are not only in ICT world, but has been a cross over multiple field and areas such as biomedical, health science, training, education and entertainment especially in content delivery. Various approaches, for example interactive application, simulations, animation and games have been adapted in delivering the contents. Games are one of the approaches that fully utilized multimedia elements, even though games have a positive and negative impact. There are so many computer based games available, but many loopholes need to be cater in terms of the game environment (the track of the game – town, city etc.), the games resources (normally used violence tools) and the game ultimate aim (to arrives at the highest peaks for example). Through the observation towards these trends, it has been the motivation to develop a 2D game named "My Journey to the Mosque" as an alternative for Muslim children playing games that indirectly allowthem to recite dzikir to arrive at the destination. Using Flash software, three level difficulty games about a journey of a girl to the mosque has been designed and developed. ADDIE has been chosen as ID model. Future work is to expand the difficulties level and platform for playing the game, also to evaluate the engagement of the target user while playing "My Journey to the Mosque".

#### Paper ID 69

# **Quran Recitation Recognition in Digital Communications using Audio-Watermarking and Biometric Signatures**

Omar Tayan<sup>1,2,a</sup>, Yasser M. Alginahi<sup>1,3,b</sup>
IT Research Center for the Holy Quran and Its Sciences (NOOR)<sup>1</sup>
Taibah University
Madinah, Saudi Arabia

Abstract: This paper addresses the problem associated with identity-verification and ownership of digital-speech/audio content transmitted online. While such issues were largely addressed in the literature for digital images, video and text, only a few studies can be found that address the challenge of audio-content verification and authentication under specific constraints of the host data such as that of the sensitive nature of the digital-Quran speech-signal, in which any physical modification to the signal can nullify the validity of the Quran-recitation. In particular, the described system is primarily intended for (but not limited to) our case-study involving identity-authentication of students reciting Quran to an instructor over an unreliable network such as the Internet. The motive in this paper is to ensure that individuals cannot illegitimately recite Quran on behalf of other students without the false-identity being detected. The techniques considered here are also of significance to many other audio-based security systems found in the literature.

Moreover, the particular problem addressed here is of key importance in many Quran-recitation centers in the Islamic world that conduct Quranic lessons online with insufficient security measures currently being used. Clearly those institutions that rely on audio-based learning and communication require effective audio-based identity-verification systems before any learning certificates can be issued to remote students. In this paper, an audio-watermarking technique combined with a biometric ownership stamp is used to address our particular challenge and application scenario. Finally, this paper presents the architecture and framework of the proposed solution, as well as the constraints/parameters considered and provides remarks of the current state-of-the-art and an insight into the related open research issues in this field.

#### Paper ID 72

#### **New Moon Observation Online Records**

Muhamad Nur Muhamad Yatim<sup>1,a</sup>, Azlena Haron<sup>2,b</sup>, Azhari Mohamed<sup>3,c</sup>

<sup>1</sup>Geodetic Survey Division, Department of Survey & Mapping Malaysia

<sup>2</sup>Planning & Corporate Division, Department of Survey & Mapping Malaysia

<sup>3</sup>Geodetic Survey Division, Department of Survey & Mapping Malaysia

Abstract: New moon or commonly known as *hilal* among Islamic astronomical scholars is an important phase in determination of new month of Islamic calendar. Every time before doing the new moon observations, observers have to prepare the equipment such as telescope, camera, CCD and documentation like pre-computation of Sun-Moon data and related form to record every movement of these two celestial objects. New Moon Observation Online Records is one of the modules in Astronomical Information Management System (AIMS) synchronised the observation data in order to record the information in real-time through online such as time, azimuth, altitude, temperature, air pressure, cloud, and surrounding atmosphere. All these information is not just for records, but also for scientific research and the most important is to deliver the new moon sighting result to the Keeper of the Rulers before the declaration of early Syawal, Ramadan and Zulhijjah in Malaysia. Development of this sub-module is not just only an application, but it is a transformation from conventional method to paperless technic. The new moon observation data are safely store and archiving in a single database. The data also represented in a single report for each observation.

## A Hybrid Approach for Indexing and Searching the Holy Quran

Ebtesam AbuShareah, Ahmad T. Al-Taani, Sawsan Shatnawi, and Faisal Alkhateeb

Department of Computer Science, Yarmouk University, Irbid, Jordan

**Abstract** The Arabic language is one of the oldest and important languages in the world. One of the challenges in Arabic language, in particular in Holly Quran, is searching for Arabic contents. In this research, we propose a hybrid system, a combination of keyword and semantic based approaches, which will be used to index and search the Holy Quran. More precisely, we will exploit the simplicity of the keyword-based approach to allow the user to enter a combination of keywords and connection operators as well as the expressiveness of the semantic (structured) approach. To do so, we index the Holy Quran as an XML document and build a user query interface in which the user query is internally transformed to an XPath query.

#### Paper ID 78

#### **Automatic Qur'an Reciter**

Majdi Sawalha1,a, Laila Al-Humssi1,b, Raya Momani1,c and Sereen Al-Saber1,d 1Computer Information Systems Department, King Abdullah II School for Information Technology, The University of Jordan, Amman, Jordan

Abstract: Recently, advances in technology allow many Muslims to recite the Qur'an from computers and handheld devices. The aim of this paper is to apply and build new technology using the Qur'an as a multimodal resource. The output of this research is a mobile application that helps users to read, recite and listen to different Qur'an recitations using one application. The application is integrated into handheld devices. It is portable, convenient to read and easy to listen to. We want to apply our understanding and expertise in automatic processing of Arabic to develop a tool that automatically processes Arabic text and sounds. We have chosen the problem of an automatic Qur'an reciter to apply these understandings of the language to the Qur'anic text and recitations. The Automatic Qur'an Reciter provides a link between the recitation speech file and the text transcript of the recitation itself. This application stores a variety of reciters and the text of the Our'an. The link between recitation and text is accomplished by highlighting the words in the text that are simultaneously being read by the reciter. The highlighting process depends on the length of the text (i.e. number of words and letters in the chapter and in the verse), the speed of the recitation (i.e. the recitation styles in terms of speed (fast, medium and slow)) and the number of pauses between words and verses. Based on these three factors, we developed a specialized algorithm that performs several calculations to synchronize between sound and transcript in a recitation of the Qur'an. The criteria of: validation and completeness; Heuristic Testing; and Cooperative Testing were used to evaluate the application.

## **Intelligent Tool for Mufti Assistance**

Hamid Amari<sup>1, a</sup>, Fadila Atil <sup>2,b</sup>, Nora Bounour <sup>3,c</sup> and Nabila Nouaouria <sup>4,d</sup>

<sup>1</sup> Emir Abdelkader university of islamic science

<sup>2,3</sup> University Badji Mokhtar

<sup>4</sup> Computer Science Department, UQAM

**Abstract:** In the Islamic legislation, the Fatwa consists in the exhibition of a legal opinion in respect of the Islamic precepts. In this paper we focus our interest on reasoning modes in legal domain and more exactly in Islamic legislation field. Our approach consists in solving a new problem by reusing the solution of a similar problem already met, and stored in a memory of cases. The interpretative case based reasoning is a process of assessment of situations or solutions in a previous experience context. It is naturally daily used. Indeed, judges in their courthouse interpret a new situation in the light of case already met (case of jurisprudence). In the following, we are interested in applying this style of reasoning in the Islamic legislation field as a tool of information retrieval which can be used during the process of Fatwa generation.

#### Paper ID 86

## Text Analytics and Transcription Technology for Quranic Arabic

Majdi Sawalha<sup>1</sup>, Claire Brierley<sup>2</sup>, Eric Atwell <sup>2</sup>, and James Dickins<sup>3</sup>

<sup>1</sup> University of Jordan, Amman, Jordan

<sup>2</sup>University of Leeds, Leeds, UK

<sup>3</sup>AMES, School of Modern Languages and Cultures, University of Leeds, Leeds, UK

**Abstract:** Natural Language Processing Working Together with Arabic and Islamic Studies is a 2year project funded by the UK Engineering and Physical Sciences Research Council (EPSRC) to study prosodic-syntactic mark-up in the Quran (Atwell et al 2013). Tajwīd or correct Quranic recitation is very important in Islam. The original insight informing this project is to view tajwīd mark-up in the Quran as additional text-based data for computational analysis. This mark-up is already incorporated into Quranic Arabic script, and identifies phrase boundaries of different strengths, plus lengthened syllables denoting prosodically and semantically salient words. We have developed a grapheme-phoneme mapping scheme (Brierley et al 2014), plus state-of-the-art software (Sawalha et al 2014) for generating a stressed and syllabified phonemic transcription or citation form for each word in the entire text of the Quran, using the International Phonetic Alphabet (IPA). This canonical pronunciation tier for Classical Arabic is informed and evaluated by Arabic linguists, tajwīd scholars, and phoneticians, and published in an open-source Boundary-Annotated Quran corpus and machine learning dataset (ibid). We utilise statistical techniques such as keyword extraction 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). Our 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.

# An Ontology Based Framework for Shariah Sustenance in the West

Rasheed Rabbi

Department of Computer Science, George Mason University, Virginia, USA Islamic Studies, Hartford Seminary, Connecticut, USA

**Abstract:** The tremendous technological success of 21<sup>st</sup> century is actually empowered by mastering the true manipulation of information. Yet the efficient linking of endless bits of information has not led to truly mature communication, which connects the right to the right semantic place. This deficiency is further complicated by the continuous adaptability of information to each user's changing context, such as environment and objective. This phenomenon has caused greater complication within Islam, because Islamic discourses are often thousands of years old, and so have produced abundant unconnected information that lacks ontological connection. Each day the strain to link the scriptural text with everyday life is getting more difficult. Moreover, the pluralistic feature of Shariah makes it convoluted to the lay people in the West. The framework proposed in this paper provides an automated hierarchical compilation of laws and commandments, both historical and contemporary, to develop an integral knowledge base for efficient representation and easy reasoning. Such representation and reasoning will remove the controversial shroud of Shariah by bringing transparency into the existing Alternative Dispute Resolution (ADR). The novelty and efficiency of this knowledge base lies in a series of back end processing namely semantic text mining. This approach sort concepts, enriches the existing texts and creates greater relevancy of texts. The paper attempts to abridge three different areas. First it offers a brief overview of the Shariah life cycle. This foundation set the stage for the second area of identifying the macro scope of the integrated IT framework for Shariah. Finally, it dives deep into the logical architecture of the framework.

## Paper ID 97

# Simple Instruction of Structural Interpretation of Baqare Chapter using Tree diagrams

Bi Bi Zeinab Hosseini, PhD Assistant professor, Yasouj University ,Iran

Abstract: Structural interpretation is a new method in interpreting the holy Quran. Structural interpretation is construed as interpretation in the light of chapter purpose and its relation to the verses. The holy Quran includes 114 chapters and 6236 verses in Koofi counting method. All Muslims are supposed to learn the general concepts of the holy Quran. Structural interpretation drawing on tree diagrams is deemed as one of the most proper methods in teaching interpretation for people of diverse levels of knowledge and acquaintance. It might be argued that it leads to the retention of the general content of the chapter. It is practicable in teaching many chapters including Baqare, Al-Emran etc. This study aims at showing how this method, employing tree diagrams, makes go-togetherness of verses in relation to the chapter purpose identifiable in Baqare as the longest chapter in the holy Quran. As such, chapter content can be grasped by all readers.

# Recognizing culture based religious icons from muslim culture user interface design (MCUID) prototype.

Zan Azma Nasruddin <sup>1</sup>, Husnayati Hussin <sup>2</sup> <sup>1</sup> Universiti Teknologi MARA, Malaysia <sup>2</sup>International Islamic University Malaysia

Abstract: The phenomena nowadays, numbers of metaphor worlds and their participants that growing rapidly, primarily is a Western Culture dominated environment. Attention paid to other culture is still very little. There is an assumption that if metaphor worlds are to become a truly global platform for users then it will be essential to "encode" the flexibility for social interactions to take place in a way that is sensitive to other cultures and most important matters that could give values to the target users. It is understood by Muslims that ever since Allah has used metaphor to send His messages to mankind through Al Quran. Inspired from it, the key concern is to shift the focus of development from standard interface design to Islamic interface design. A framework has been developed adapted from Culture Centered Design. Important factors have been added to the framework especially on Islamic values as a way of life and a journey towards Allah. Furthermore, an interface prototype known as Muslim Centered User Interface Design (MCUID) prototype is created. This paper focused on the empirical investigation through interface recognition test using closed card sorting technique towards the prototype. The analysis tabulated the patterns of Muslim users' perceptions using Atlas.ti 7 both in qualitative and quantitative measurements

## Paper ID 100

# Designing 3 Dimensional Virtual Reality Using 360 degree Photography (360 DP) to trains and prepare pilgrims for Umrah

Normala Rahim Universiti Sultan Zainal Abidin

Abstract: This paper investigates and proves the potential of using 360 Degree Photography (360 DP) technique to enhance an interactive tool of technology based learning and training lead to an idea to develop Virtual Umrah (VU) application for the benefit of our future. These techniques divide by two components which is Virtual Environment (VE) and Virtual Object (VO). The Virtual Reality (VR) of 360 DP techniques is a learning based environment, essential to help educators overcome the limitations in traditional training sessions. This technique will help users to understand better by providing the simulations of real-world using image based model with high degree of realistic user experience and interactivity. The VU module shows the real activities of the Umrah ritual and helps to generate ideas to pilgrims on what they have learnt. This paper discusses part of the design of the 360 DP techniques in developing VU application. The important phases for developing successful 360 DP are image acquisition and image stitching or mosaicking using photography skill.

# Proposing the Program for Developing the Novel Quran and Hadith Authentication System

Amirrudin Kamsin1, Abdullah Gani1, Ishak Suliaman2, Salinah Jaafar3, Rohana Mahmud1, Aznul Qalid Md Sabri1, Zaidi Razak1, Mohd Yamani Idna Idris1, Maizatul Akmar Ismail1, Noorzaily Mohamed Noor1, Siti Hafizah Ab Hamid1, Norisma Idris1, Mohd Hairul Nizam Md Nasir1, Khadher Ahmad2, Sedek Ariffin2, Mustaffa Abdullah2, Siti Salwah Salim1, Ainuddin Wahab Abdul Wahid1, Hannyzzura Pal@Affal1, Suad Awab4, Mohd Jamil Maah5, Mohd Yakub Zulkifli Mohd Yusoff2

1Faculty of Computer Science and Information Technology; 2Academy of Islamic Studies, 3Academy of Malay Studies; 4Faculty of Languages and Linguistics; 5Faculty of Science; University of Malaya,

**Abstract**: It is a challenge to identify who actually holds the valid copy of the holy Quran, or whether one digital copy is tampered or not. In fact, previous literature has shown that most of people were not aware of the distribution of fake copies of Quran online. Majority of them have raised the importance of having a central Islamic body to control and determine the authenticity of the holy Quran. We therefore, propose to develop and evaluate the Quran authentication system. The aims are to provide reliable and intuitive system to assist both the central body and end users to assess the authenticity of the digital Quran applications, before using them. It can be used as a tool/mechanism to improve the digital Quran publishing laws and users' confidence towards digital Quran applications.

#### Paper ID 103

## A New Distributional Semantic Model for Classical Arabic

Maha Alrabiah1, a, AbdulMalik Al-salman1,b and Eric Atwell3,c 1Department of Computer Science, King Saud University, Saudi Arabia 3School of Computing, University of Leeds, UK

**Abstract**: Classical Arabic forms the basis of Arabic linguistic theory, and it is the language in which the holy Quran was revealed. To the best of the authors knowledge, no previous attempts were made to build a distributional lexical semantic model for Classical Arabic. In this paper, we present a new association measure, the Refined Dice, for detecting syntagmatic relations between words in a very large corpus of Classical Arabic. In addition, an experimental study to evaluate the performance of the proposed measure is presented. The measure showed outstanding results in identifying collocations and significant co-occurrences from a very large corpus of Classical Arabic

# Global E-health Application in Hajj Season or E-health Initiative during Hajj Season

Rasmeh Al-Huneiti1, Ziad Hunaiti1, Mohammed Al Masarweh2 and Zayed Huneiti3

1School of Engineering and Design, Brunel University, United Kingdom 2College of Information Technology, WISE University, Jordan 34College of Engineering, Al-Isra University, Jordan

**Abstract**: This paper aims to draw the attention of decision makers as well as to suggest a call for global initiative for the utilization of e-health application during Hajj season. Also, to encourage scientific debate and writing to set the stage for such a promising initiative to optimize the quality of health services provided for pilgrims. The current published data on e-health application utilization in Saudi, the host country, for the pilgrimage have been reviewed and analyzed to formulate a picture about e-health utilization during hajj. There is limited amount of published work on e-health application during Hajj season. This provides a solid rationale to proceed further to call for e-health application initiative during the Hajj season as a mean to improve healthcare services through Hajj season.

#### Paper ID 107

# An Interpretation of Sura "Fussilat" using Tree Diagram Neda Khodashenas Firuzabadi, Mojdeh Hashemi Namin, Hassan Rostami

PhD student of Qur'an and Hadith Sciences, Ferdowsi University of Mashhad, PhD student of Iran University of Science and Technology, Tehran, Iran Assistant Professor, Ferdowsi University of Mashhad, Mashhad, Iran

**Abstract:** Sura "Fussilat" is one of the suras in which the word  $\bar{a}y\bar{a}t$  and concept of  $tafsil\ \bar{a}y\bar{a}t$  appear in the first verses. The word  $\bar{a}y\bar{a}t$  used in this sura has been interpreted by most commentators as referring to the revelation of Qur'an. However, from the very first verses, this sura extends in scope beyond revelation of Qur'an to include  $sam\bar{a}w\bar{a}t$  (the heavens) and ardh (the earth), and to  $\bar{a}f\bar{a}q$  (remote parts of the earth) and anfos (souls), to the extent that it apparently seems this sura is thematically inconsistent. Given this, the present paper tries to show this sura is a consistent text by identifying the narrative thread and objectives of this sura, and what links the verses of sura. For this purpose, a tree relationship was drawn between the verses of sura "Fussilat" in an "animation". This sura provides an explanation of the grand event of " $Al-S\bar{a}$ 'at" (the hour (of resurrection or judgment)), which is detailed in four types of  $\bar{a}yat$ . These  $\bar{a}y\bar{a}t$  include  $\bar{a}y\bar{a}t$  found in  $kit\bar{a}b$  (the book),  $\bar{a}y\bar{a}t$  in  $\bar{a}f\bar{a}q$ , anfos, ardh, and  $sam\bar{a}w\bar{a}t$ . The tree method, which had been in common use in the past to help understand and memorize complex or lengthy textbooks, was used in this paper to present the Qur'an's interpretation more interestingly and to show the relationship between the verses with the aid of computer software

# **Special Education Application for Children with Autism: The Salat Application**

Hasmiza Othman1, a, Salwani Mohd Daud2,b and Hafiza Abas3,c 1Computer and Information Technology Department, King Abdul Aziz University, Kingdom of Saudi Arabia 2,3 Advanced Informatics School, University of Technology, Malaysia

**Abstract:** There are many Islamic special education applications available in Google Play Store portal which are ready for download (free or commercially) for both categories of users; adults and children. These educational applications are available to cater to many aspects of religious learnings like Quran reading, fiqh, tawheed, du'a and prayers, as well as salat. Many of these applications claimed to be appropriate for all kinds of learners. The purpose of this paper was to study these applications and the presence (or absence) of the specific design features that were essential to help children with autism to learn salat. A comparative study using design solutions recommended by Moore and Travers (2012) was adapted in the study. New conceptual model of salat application was proposed and future studies were also discussed in the last part of the paper.

## Paper ID 109

# The State of Online Audio Qur'an and Its Public Perception

<sup>1</sup>Adamu Abubakar, <sup>1</sup>Akram Zeki, <sup>1</sup>Akmal Hisham, <sup>1</sup>Murni Mahmud, <sup>2</sup>Haruna Chiroma, <sup>3</sup>Tutut Herawan

<sup>1</sup>Department of Information Systems, International Islamic University Malaysia, Malaysia

<sup>2</sup>Artificial Intelligence Department, University of Malaya, Kuala Lumpur, Malaysia

<sup>3</sup>Department of Information Systems, University of Malaya, Kuala Lumpur, Malaysia

Abstract: The Qur'an has become widely accessible in the internet and is available in audio, text and animated video format. However, the uncertain credibility of most of these online sources makes it hard for users to ascertain the authenticity of the Qur'anic text as appearing on screen. The need to first establish the authenticity of the Qur'anic text as presented on the web justifies a detailed examination of the phenomenon of online audio Qur'an and the way its reliability and usefulness is perceived by users. This study uses quantitative survey research methodology and investigates the state of online audio Qur'an and its perceived impact. The research findings indicate that "trust" and "accuracy" exerts a huge impact on positive perception of the source and content of online audio Qur'an. However, the effect of accuracy and trust on the content and sources of online audio Qur'an are perceived differently whereas the perception of the quality of content of online audio Qur'an is common. Also, the majority of users remain skeptical of the credibility of most of the sources of online Qur'an in almost all formats.

# The State of Online Audio Qur'an and Its Public Perception

<sup>1</sup>Adamu Abubakar, <sup>1</sup>Akram M. Zeki, <sup>1</sup>Akmal Hisham, <sup>1</sup>Murni Mahmud, <sup>2</sup>Haruna Chiroma, <sup>3</sup>Tutut Herawan

<sup>1</sup>Department of Information Systems, International Islamic University Malaysia, Malaysia <sup>2</sup>Artificial Intelligence Department, University of Malaya, Kuala Lumpur, Malaysia <sup>3</sup>Department of Information Systems, University of Malaya, Kuala Lumpur, Malaysia

Abstract: The Qur'an has become widely accessible in the internet and is available in audio, text and animated video format. However, the uncertain credibility of most of these online sources makes it hard for users to ascertain the authenticity of the Qur'anic text as appearing on screen. The need to first establish the authenticity of the Qur'anic text as presented on the web justifies a detailed examination of the phenomenon of online audio Qur'an and the way its reliability and usefulness is perceived by users. This study uses quantitative survey research methodology and investigates the state of online audio Qur'an and its perceived impact. The research findings indicate that "trust" and "accuracy" exerts a huge impact on positive perception of the source and content of online audio Qur'an. However, the effect of accuracy and trust on the content and sources of online audio Qur'an is common. Also, the majority of users remain skeptical of the credibility of most of the sources of online Qur'an in almost all formats.

## Paper ID 113

# E-Tafseer: Plants and Animals from Al-Quran

Farahwahida Mohd Yusof<sup>1,a</sup>, Mazura Md. Din<sup>2,b</sup>, Anazida Zainal<sup>3,c</sup>, Zaidatun Tasir<sup>4,d</sup>, Arieff Salleh Rosman<sup>5,e</sup>, Tamar Jaya Nizar<sup>6,f</sup>, Ahmad Muhaimin Mohamad<sup>7,g</sup>

1,5,6,7</sup>Center of Research for Fiqh Science & Technology (CFiRST),

2,3</sup>Faculty of Computing, <sup>4</sup>Faculty of Education, Universiti Teknologi Malaysia, MALAYSIA

**Abstract:** In the past, great Muslim scholars have tafseer most of the verses in Qur'an related to plants and animals from scientific perspective. The majority of these tafseer are distributed in conventional form which is book. This knowledge dissemination method is less effective and does not help the society to understand Qur'an from scientific perspective and gain benefits from it. On the other hand, results from the scientific research done in the west related to plants and animals is known to the society due to its implementation and dissemination method which is more suitable with the current technology used by the society. This situation leads to a perception that science is not being emphasized and embraced in Islam whereas the history proved otherwise. Therefore, it is important that an effort has to be taken to disseminate scientific information about plants and animals in Qur'an to the society by exploiting the current technology. This research is aimed at developing interactive tafseer on plants and animals specifically dates, olive, flies and bees in three mediums; web portal with social element; multimedia application at stand-alone kiosk; and mobile application. The methodology of this study is divided into four phases; (1) thematic gathering of related Qur'anic verses and hadiths, (2) drawing correlations between the output from phase one and contemporary outputs of scientific research produced by both Muslim scholars and Western scientists, (3) content designing e-Tafseer to suit the three interactive dissemination mediums; website, kiosk and mobile apps while retaining the content and with the same purpose and standard graphical theme. It is hoped that this pioneering work can serve as an impetus to encourage more development effort to produce more interactive digital tafseer applications from scientific perspective.

#### Paper ID 115

# A Topical Classification of Hadith Arabic Text

Mohammed N. Al-Kabi<sup>1</sup>, Heider A. Wahsheh<sup>2</sup>, Izzat M. Alsmadi<sup>3</sup>
<sup>1</sup> Zarqa University, Zarqa, Jordan
<sup>2</sup>King Khaled University, Abha, Saudi Arabia
<sup>3</sup> Boise State University, Boise, ID 83725, USA

Abstract: Text classification is important in many aspects of our modern life. Text classification is used to classify different documents into one of different possible classes or domains. It can be used for several purposes such as recognizing handwriting and speech, determining the gender of a writer, identifying an author, and determining the polarity of a sentiment. It is also adopted by QA systems, search engines, etc. There are many studies related to text classification, and its application in different aspects of life. However, few studies were conducted on the classification of Prophet Mohammed (Peace and blessings of Allah be upon him (PBUH)) sayings. This study aims to evaluate the effectiveness of three classification algorithms (Naïve Bayes (NB), Bagging, and LogiBoost) to classify Prophet Mohammed (PBUH) Arabic text sayings into one of four classes according to their contents. This study is based on (Sahih Bukhari, "صحیح البخاري"); a collection that considered a trusted and acknowledged by most Muslim scholars.

#### Paper ID 118

# Multimedia Instructional Learning System to Aid in Teaching Quran Recitation with Effective Tajweed in Primary Education of Malaysia

Tariq Hassan Mssraty, Dr. Qais Faryadi Faculty of Science and Technology, Universiti Sains Islam Malaysia (USIM)

Abstract: The advent of multimedia learning system brought about enormous transformation in the learning pattern at various settings, yet its benefits have not been explored to improve religious practices in Malaysia. Prior studies consistently pointed out the weakness encountered by Malaysian students in observing the basic rules of Quran teaching and recitation and strongly emphasized that an urgent measure is to be taken. In an attempt to circumvent the predominated error at Malaysian schools, this study focuses on developing a multimedia instructional learning system to aid in teaching Quran recitation with effective Tajweed in primary education of Malaysia. A quantitative research method based on a survey questionnaire was used to collect data and validate the appropriateness of a multimedia design approach (ALMONEER) system developed in this study. The result showed that the system tremendously improved Quran teaching and recitation using an easy-to-understand methodology coupled with social features such as puzzle that motivated the students. Findings of this research confirmed that the multimedia model enhances learning better than the conventional learning system. It then, becomes evident that the developed model standout to improve learning capability of Quran students and the teacher's instructional approach in Malaysia.

# Accepted Papers in Arabic

# الأبحاث المقبولة باللغة العربية

#### Paper ID 5

# استعمال الأجهزة الصوتية الحديثة في خدمة علم التجويد

عادل إبراهيم أبو شعر

الأردن – عمان – جامعة العلوم الإسلامية العالمية – طبربور

الخلاصة: هذه المقالة تتناول أهم الأجهزة الصوتية المتخصصة التي استعملت تقنية الحاسوب في العملية التعليمية للقرآن الكريم، وهي أجهزة تستعمل لأغراض طبية وصوتية، فمنها ما يستعمل لمعالجة عيوب النطق والكلام (كالغنة من الأنف)، والصعوبات النطقية التي تحدث لبعض الناس. ومنها ما يستعمل لأغراض صوتية تجويدية، وهي التي تعنيينا في هذا البحث، وقد بدأته بمقدمة ومطالب ستة، وخاتمة، نسأل الله – عز وجل – التوفيق والسداد

#### Paper ID 11

# تقنيات التعليم الإلكتروني للقرآن الكريم وعلومه

أ. فرحة ليندة

كلية العلوم الاقتصادية والتجارية وعــــوم التــــير حــامعـــة جيجـــل

الخلاصة: إن التطور الكبير والسريع في تقنية المعلومات كان السبب الرئيسي في نمو تقنيات التعليم الإلكتروني، والتي زودت مختلف المؤسسات المعنية بتعليم وتحفيظ القرآن الكريم، بتوسيع حدماتها إلى كل أنحاء العالم، مما القوية لتحسين حودة تعليمها، حيث فتحت المجال أمامها، ومنها المؤسسات المعنية بتعليم وتحفيظ القرآن الكريم، بتوسيع حدماتها إلى كل أنحاء العالم، مما ساعد على توفير بيئات تعليمية للقرآن الكريم وعلومه تحاكي مراكز تعليمه وتحفيظه التقليدية، فبعد الانتشار الواسع للإنترنت أنشئت مئات المواقع الإلكترونية، وبلغات عديدة لتعليم وتحفيظ القرآن الكريم وتعليمه، وتعليمه، والموجهة للمسلمين عرب وغير عرب حاصة في البلدان التي لا تتوفر فيها سبل تعلم القرآن الكريم وتعليمه بالطرق الاعتيادية التي تتم بالتواصل المباشر بين الطلبة ومشايخهم. وفي هذا البحث سيتم توضيح ماهية التعليم الإلكتروني، واستعراض مختلف مجالات التعليم الخاصة بالقرآن الكريم وعلومه والفوائد المحققة في كل بينان، إضافة إلى استعراض مجموعة مختارة من البرامج الحاسوبية ومواقع الإنترنت المهتمة بتعليم القرآن الكريم وعلومه ومدى الخدمات التي تقدمها

# تقنية المعلومات ودورها في خدمة الاسلام: بالاشارة الي المركز القومي للبحوث - الخرطوم العيض المحمد

الخلاصة: قد استطاعت التقنية الحديثة من فرض حضورها المادي والمعنوي بقوة في الحياة المعاصرة، وعلى المستويات السياسية والاقتصادية والاجتماعية والعلمية الاسلامية، وذلك للتطور الهائل الذي وصل إليه الإبداع التقني في المرحلة الراهنة. ومع ظهور هذه التقنيات ، وبروز إسهاماتما في الميادين المختلفة ولاسيما ميدان يعوة والعلوم الاسلامية ، ومنها السنة النبوية المطهرة ، وعلومها أضحت الحاجة ماسة إلى التعريف بتلك التقنيات ، وانعكاساتما على الدعوة والعلوم ، ووصف تهود المبذولة فيها ، وإحصاء ما أنتج منها ، وذلك تقريبا لتلك الجهود إلى الأذهان، وتيسير سبل الوقوف عليها ، وتدارك ما فيها من هفوات، وبيان ما لها وما يها، ومحاولة النهوض بها، وتلافي الأخطاء الحاصلة فيها. وقد جاءت فكرة اختيار موضوع البحث من خلال تعامل الباحث مع ما أنتجته التقنيات الحديثة في أن العلوم الاسلامية وقد أراد الباحث أن يتحقق من مدى توظيف التقنيات في خدمة الدعوة الاسلامية وذلك عبر الوقوف علي تجربة المركز القومي للبحوث وبيان البرمجية التي يعمل بها من خلال بطيف قاعدة البيانات الموجودة به لحدمة الاسلام. ثم تناولت الدراسة بيان أثر التقنيات الحديثة المعاصرة في خدمة الدعوة الاسلامية والعلوم الشرعية وراي عينة بيا المعالم السودانية عن قواعد البيانات الموجودة بالمركز والتي تمتم بالعلوم الاسلامية. واخيرا خرجت الدراسة بعدد من النتائج إسة الحالة للوقوف على التقنية الموجودة بالمركز القومي للبحوث ومدي الافادة منها في خدمة العلوم الاسلامية. واخيرا خرجت الدراسة بعدد من النتائج الموسيات التي من شانحا ان تساهم في خدمة الدعوة والاسلام عبر استخدام التقنيات الحديثة وقواعد البيانات للاستفادة منها باكبر قدر ممكن.

## Paper ID 14

# العلوم الإسلامية في مختبرات إلكترونية نور عزة بنت قمرى و ماجد أبو غزالة

جامعة مالايا، ماليزيا

الخلاصة: ضمن عملية تطوير التعليم الحديث تطلب إدارج أحدث الأجهزة في عملية التعليم والتعلم، ففي مطلع القرن الحالي ظهرت أفكار كثيرة لاستخدام الحاسوب والأدوات والبرامج المصاحبة له كبديل للكتب التقليدية بالكتب الالكترونية، واستحداث المكتبة الالكترونية بمعلومات متنوعة كثيرة وذات طابع شمولي في جميع المواضيع للعلوم الأدبية والإنسانية والتطبيقية والتحريبية. الأمر المهم لدى جميع الطلبة أن التعليم التقليدي لديهم سبب في تجاوز العلم وتجاهل أهمية المعلومات من الكتب والمراجع القديمة التي تعد في عصرنا الحالي من الأمور الثقيلة في حملها لأنها تشكل عائق في حياتهم اليومية، واعتبار مهمة التعليم إجبارية غير ممتعة الهدف منها دخول سوق العمل في تخصصات مختلفة، وهذا يعود لعوامل متعددة منها: أن نظام التعليم مازال تقليدي، أي أن المحيط الخارجي طاله التقدم والرقي في التعامل مع العلوم والمعارف بشتى الوسائل والتقنيات الحديثة، أما البيئة الداخلية مازالت الفرصة لم تطرق أبوابها لتوجيه هذا العلم للطلبة في التعامل مع أحدث الأجهزة والأنظمة والمعلومات. ظهرت أفكار كثيرة لاستخدام الحاسوب اللوحي كأداة للتعليم الإلكتروني وكبديل للحقيبة الثقيلة، وكانت هناك تجارب عديدة في هذا المجال وكان لكل تجربة ميزاتها ومساوئها، إلا أن الفكرة التي نطرحها هي استخدام الحاسوب اللوحي كحزء من العملية التعليمية، عيث يتم تجهيز المبنى بعدد من الغرف الصفية التي تحتوي على الحاسوب اللوحي الكواح الحاط التفاعلي الموحي المعلم المعلية التعليمية، بحيث يتم تجهيز المبنى بعدد من الغرف الصفية التي تحتوي على الحاسوب اللوحي المحاسوب اللوحي كحزء من العملية التعليمية المهاد علي لوح الحاط التفاعلي المعاسة المعاسفة التعد عدي العاسوب اللوحي كمور الغرف الصفية التي تحديدة في هذه المحاسوب اللوحي كمور الغرف الصفية التي علية علية المعاسفة التي عديدة في هذه المعال المعاسفة التي الحاسوب اللوحي كمور على العملية التعليم المعاسوب اللوحي كمور الغرف الصفية التي الحاسوب اللوحي كمور على لوح الحاسوب اللوحي كمور على العملية التعليم المعاسفة المعا

# (تعليمُ اللَّغة العربيَّة للناطقين بغيرها عبر برامج المعرفة الرَّقميَّة) نورة على خليل, خالد محمد حمدان

جامعة الإمارات العربية المتحدة، العين. الإمارات العربية المتحدة

الخلاصة: الحمد لله رب العالمين، والصلاة والسلام على أشرف المرسلين، سيدنا محمد (صلى الله عليه وسلم) وعلى آله وصحبه، ومن تبعهم بإحسان إلى يوم الدين. و بعد، فإنَّ التقدَّم التكنولوجي الهائل الذي يعيشه العالم الآن فتح الآفاق أمام الراغبين في نشر لغتهم على نطاق جغرافي كبير دون التقيّد بحدود زمانيّة أو مكانيّة، وقد أصبحت الأجهزة الحديثة كالهواتف الذكيّة، والآيباد، وغيرهما في أيدي شريحة كبيرة من الناس على مستوى العالم، وقد أتاح هذا الانتشار فرصة سانحة لتعلّم اللّغة عبر هذه الأجهزة. وقد انطلقت هذه الدراسة من المعطيات التالية:.

أنَّ كثيرًا من الناطقين بغير اللغة العربية يتوقون إلى تعلمها في شتى أنحاء العالم. .

أنَّ برامج المعرفة الرَّقميَّة قادرة على تحقيق نتائج متميّزة في هذا الجحال.

. أنَّ برامج تعليم اللّغات - في العصر الحديث- قد تغيرت أهدافها ووسائلها، بما يسمح للطالب بالتعلّم الذاتي بشكل كبير.

وانطلاقًا من المسلمات السابقة، ستقدم هذه الورقة نموذ كا تطبيقيًا لتعلّم أساسيات اللّغة العربية بواسطة أحد برامج المعرفة الرقميّة في بيئة التعلّم المتنقل، وذلك من خلال تطبيقات خاصة، هي (آي بوك أوثر. كينوتس للعروض التطبيقية. والبرامج المرئية والصوتية)؛ وذلك بحدف التيسيير على مُتعلّم اللغة العربية من غير الناطقين بحا.وتتلخص إشكالية البحث في كيفية تطويع برامج المعرفة الرقميّة لخدمة التعلّم الذاتي للغة العربيّة، بما لا يُخل بالمحتوى المعلوماني. أما عن حدود البحث، فقد تم تطبيقه على عينة من الطلبة غير الناطقين باللغة العربية الملتحقين بجامعة الإمارات، إضافة إلى عدد من الموظفين المنتسبين إلى الجامعة نفسها. وكانت هناك الكثير من الدراسات السابقة في هذا الجال، مثل: دراسة (العدد في العربية وتعليمه لغير الناطقين بحا) صالح الفرج، 1413ه، و (المعجم الأساسي في تعليم اللغة العربية لغير الناطقين بحا) على الزغبي، 1413ه.

#### Paper 31

# استخدامات الطلبة الناطقين بغير اللغة العربية للتعليم المحوسب وضرورته في تحصيل مادة التلاوة والتجويد البنهاج راضي عبد الرحمن

كلية الدعوة وأصول الدين، جامعة العلوم الإسلامية العالمية

الخلاصة: هدفت هذه الدراسة إلى معرفة مدى استخدام الطلبة الناطقين بغير اللغة العربية للتعليم المحوسب، من خلال تدريس هذا المساق في كل من الجامعة الأردنية، وجامعة العلوم الإسلامية العالمية، حيث تبين أهمية التعليم المحوسب في رفع المستوى وزيادة التحصيل الدراسي، ورافقت هذه الدراسة استبانة وضحت أهمية التعليم المحوسب لدى الطلبة الناطقين بغير اللغة العربية. واستعرضت الدراسة أهم المشاكل التي تواجه الناطقين بغير العربية عند تعلم مساقات التلاوة والتحويد، وخلصت الدراسة بنتائج وتوصيات من شأنها أن تسهم في تقديم حلول للمشاكل التي توصلت إليها الدراسة

# نظام فواصل الآيات القرآنية

مُولاي إبراهيم الخليل غمبازة1، \*، رفعت حسن الزنفلي2، \*

1 قسم علوم الحاسب الآلي، كلية علوم وهندسة الحاسب الآلي، جامعة طيبة، المدينة المنورة، المملكة العربية السعودية 2 قسم علوم الحاسب والملومات، كلية المجتمع، جامعة طيبة، المدينة المنورة، المملكة العربية السعودية

الخلاصة: تتلخص فكرة البحث في بناء نظام معلومات قرآنية شامل يلم بجميع ألفاظ وعبارات الفواصل القرآنية في الآيات القرآنية، ويمكن المستخدم من البحث من خلاله وتتبع هذه الفواصل عن طريق محرك بحث لفظي وسياقي على أساس قواعد موصلة لحفظ هذه الفواصل والتمبيز بينها، وربطها بالدليل العلمي المستمد من كتب علماء الأمة والمتخصصين في هذا العلم؛ حتى يكون سبباً وعوناً لإبراز هذا العلم ونشره بين المسلمين وتسهيله على طالبه وتمكين حفظة كتاب الله من ترسيخ الحفظ وتثبيته من خلال فهم وتدبر معاني ومناسبات فواصل الآيات. وتنقسم منهجية البحث إلى عدة مراحل: في المرحلة الأولى، تم الاستعانة بمراجع شرعية لجمع البيانات والمعلومات، ثم دجها في قاعدة بيانات علائقية. أما في المرحلة الثانية، تم تحليل ما تحصلنا عليه من بيانات الآيات القرآنية وفواصلها، سور القرآن الموجودة فيها هذه الآيات، مناسبات الفواصل مع مواضيع الآيات، وكل ما يتعلق بنوع وصنف وبنية الفاصلة. بعدها تم تطبيق تقنيات البحث الحاسوبية المعتمدة على التحليل الصرفي الآلي للغة وكذلك خوارزميات المقارنة بين النصوص في معالجة النصوص لاستخراج وتصنيف الفواصل متعددة للباحثين والمستخدمين من خلال عمليات البحث عن فواصل الآيات القرآنية وما يتعلق بحا من حيث أنواعها (ومن أهمها فواصل أسماء الله الحسني) متعددة للباحثين والمستخدمين من خلال عمليات البحث عن فواصل الآيات القرآنية وما يتعلق بحا من حيث أنواعها (ومن أهمها فواصل أسماء الله الحسني) لفظياً؛ بحيث أن الفاصلتين قد تختلفان في موضعين والمحدث عنه واحد، أو قد تتفقان في موضعين مختلفين من آيتين والمحدث عنه لحناف. ويتبح النظام إظهار الفاصلة في سياق الآية أو الآيات.

#### Paper ID 52

# دراسة تحليلية لبرامج تعليم القرآن الكريم وعلومه من خلال معايير التعليم الإلكتروني عبدالله بن محمد آل بن على

الخلاصة: هدفت الدراسة إلى التعرف على أثر استخدام الحاسوب و تطبيقاته البرجمية في مجال تعليم القرآن الكريم و علومه بشكل خاص. اتبعت الدراسة على عينة المنهج الوصفي المسحي، واستخدمت قائمة تحليلية كأداة لإحابة أسئلتها. أحريت الدراسة في الفترة من مارس إلى أغسطس 2014، وطبقت على عينة عشوائية من المواقع الالكترونية الخاصة بتعليم القرآن الكريم و علومه بلغت (30) موقع تعليمي على شبكة الانترنت، و توصلت الدراسة إلى أن الحاسوب يمكن أن يعد وسيلة متطورة لنقل وتوزيع العديد من المواد التعليمية الخاصة بتعليم القرآن الكريم وعلومه ,كما يظهر جلياً الدور الذي يلعبه الحاسوب لما له من خصائص و مزايا في إكساب وتعزيز المهارات الأساسية في تعليم القرآن الكريم كالقراءة والتحويد وغيرها ،بالإضافة للعلوم الأحرى المتصلة به كالتفسير مثلاً ، ما جعل تعليم القرآن الكريم و علومه يتفوق على تعليمه بالطرق التقليدية.

# تطبيقات تكنولوجيا المعلومات في تدريس التربية الإسلامية دراسة تطبيقية على الحلقة الثانية من التعليم الأساسي بسلطنة عمان.

ميمونة بنت درويش الزدجالية جامعة السلطان قابوس

الخلاصة: هدفت الدراسة إلى التعرف على أثر استخدام الحاسوب و تطبيقاته البرجمية في مجال تعليم القرآن الكريم و علومه بشكل خاص. اتبعت الدراسة المنهج الوصفي المسحي، واستخدمت قائمة تحليلية كأداة لإجابة أسئلتها. أحريت الدراسة في الفترة من مارس إلى أغسطس 2014، وطبقت على عينة عشوائية من المواقع الالكرتونية الخاصة بتعليم القرآن الكريم و علومه بلغت (30) موقع تعليمي على شبكة الانترنت، و توصلت الدراسة إلى أن الحاسوب يمكن أن يعد وسيلة متطورة لنقل وتوزيع العديد من المواد التعليمية الخاصة بتعليم القرآن الكريم وعلومه ,كما يظهر جلياً الدور الذي يلعبه الحاسوب لما له من خصائص و مزايا في إكساب وتعزيز المهارات الأساسية في تعليم القرآن الكريم كالقراءة والتجويد وغيرها ،بالإضافة للعلوم الأخرى المتصلة به كالتفسير مثلاً ، ما جعل تعليم القرآن الكريم و علومه يتفوق على تعليمه بالطرق التقليدية.

#### Paper ID 73

# الفكر الثقافى الإسلامى المعاصر والتقانة الحديثة دراسة تطبيقية على الموائمة الثقافية للتقنيات المعاصرة عمد نصر محمد حامعة المدينة المنورة

الخلاصة: فطن علماء ومفكروا المسلمين الأهمية تأطير ثقافتهم، وهبوا إلبا واحدا ينظمون عوامل القوة لعقد تلك الثقافة من كل جهاتما الدينية، والفكرية، والتربوية، والإعلامية، واللغوية... إلخ، ولاشك في ان إستغلال التقنيات الحديثة يسهم في نشر علمية الثقافة الإسلامية ولاشك ان ما وصل اليه الفكر والثقافة الاسلامية من انشاء حضارة مشهودة طيلة قرون من الحياة ، لم يكن الا بفعل تلك المنهجية القائمة على احسان الجدل بين تعاليم العقيدة المجردة من جهة، وبين مجالات الواقع من جهة الحرى، وهي منهجية متأتية من خصائص البنية العقلية التي صنعتها العقيدة الاسلامية ، حيث غيرت من مفاهيم علاقة الإنسان بالكون، ومكنته فيه، مرورا في ذلك بما اعطى للواقع المحسوس من قيمة مجلى في تحقيق الحياة معرفة وسلوكا.

# تأثير التكنولوجيات الحديثة على الهوية الثقافية العربية دراسة في استخدامات الشباب للغات الهجينة قجالي آمنة, سميشي وداد حامعة العربي بن مهيدي أم البواقي الجزائر

الحلاصة: إن اللغة أو النظام الرمزي هو رابط تطور الوعي البشري بتنمية عقل الإنسان أي مكون الحضارة والتاريخ الإنساني. ومما لا شك فيه أنه المهيكل للثقافة من جهة والهوية من جهة ثانية . وفي ظل ما يعيشه العالم العربي من غزو للإلكترونيات يواجه شبابه رهان استخدام الشبكة العنكبوتية في بناء ثقافة مستقبلية يبغي أن تكون منفتحة وتعدديّة، وقادرة على التفاعل مع الثقافة الكونيّة على على قاعدة النديّة إذ بإمكان الثقافة العربية الإسلامية أن تساهم في بلورة القيم الكونيّة، وأن تحترم ثقافة الآخر من منظور متساوٍ . وتندرج الدراسة الحالية التي تُعنى بالكشف عن تأثير التكنولوجيات الحديثة على الهوية الثقافية العربية وأدواره والعلاقات داخله ووظائف أفراده . ورغم صعوبة تحديد معايير دقيقة للحداثة نظرا لاختلاف المرجعيات في بناء هذا المفهوم إلا أن المتفق عليه أن استخدام التكنولوجيات الحديثة للإعلام هو أولى مظاهر الحداثة وتحدف الورقة البحثية إلى الكشف عن محددات العلاقة القائمة بين التكنولوجيات الحديثة والهوية العربية في بعدها اللغوي عبر دراسة استخدامات الشباب للغات الهجيئة؟ إذ أن قيم الحوار والنقاش عبر الميزة التفافية المعربي للقيام بممارسات لغوية نتجت عنها لغات هجيئة تعتبر مزيجا من أبرز لغات العالم: اللغوي العصري للقيام بممارسات لغوية نتجت عنها لغات هجيئة تعتبر مزيجا من أبرز لغات العالم: اللغة العربية، الإنجليزية، الفرنسية، وصف ما هو كائن وتفسيره، ويهتم بتحديد الظروف والعلاقات التي توجد بين الوقائع وتحليلها ". وخلصت الباحثيان في النهاية إلى تنام ملحوظ لخطر محدق الوصف ما هو كائن وتفسيره، ويهتم بتحديد الظروف والعلاقات التي توجد بين الوقائع وتحليه والمعنوية. ومن أهم التوصيات التي أسفرت عن هذه الدراسة بالمنه العربي في ظل غزو الإلكترونيات، إذ أصبح أكثر من أي وقت مضى مختبرا غنيا وخصبا. أضاف مسؤوليات جسيمة لحل الباحثين العرب في العلوم الإنسانية والاحتماعية.

# أهمية تقنية المعلومات في خدمة المعارف الإسلاميه حمد الربمي

الخلاصة: تلعب اليوم تقنية المعلومات والاتصالات دور كبير جداً في مختلف مجالات الحياة, و مما لا شك في بأن هذه التقنية كانت و لا تزال وستضل أساس للنجاحات التي يحققها الإنسان في شتى مجالات الحياة, و مع الدور الإيجابي الكبير والهام الذي تلعبه هذه التقنية إلا أن هناك جوانب سلبية كثيرة صاحبت تقنية المعلومات والاتصالات. تختلف تأثيرات الجوانب السلبية لهذه التقنية في المجتمعات المصنعة والمصدرة لها, بينما تزداد مخاطر وتبعات هذه التقنية على الشعوب التي جعلت من نفسها فقط سوق استهلاكية لهذه التقنية و باتت هذه التقنية كابوس يهدد المجتمعات المستهلكة و خطر حقيقي على وحدة النسيج الاجتماعي لهذه المجتمعات. يرى الباحث بأن تقنية المعلومات والاتصالات هي اليوم أمر بالغ الأهمية في تطور المجتمعات وفي الحفاظ على هويتها ووحدة نسيحها الاجتماعي, وأن مخاطر وتداعيات هذه التقنية يمكن الحد منه من خلال التوطين السليم لهذه التقنية. إن توطين تقنية المعلومات بشكل سليم لا بد أن يكون من أولويات الإعمال في عالمنا الإسلامي, نظراً لما لهذه التقنية من أهمية كبيرة في إحراز تقدم في مختلف المجالات إضافة إلى كون هذه التقنية هي أقوى وسيلة إعلامية عرفها الإنسان تأثيراً على حياة الأفراد و على سلوكهم. إن القضاء على عاملي الزمان والمكان من المحاف المنا الإسلامية و يحدة المعارف الإسلامية. تركز هذه التقنية من أهمية المعلومات بناءً على النموذج الماليزي الناجح و بحدف درئ المخاطر التي تسببها هذه التقنية الناجمة عن بقائنا الأصعدة و تطويع هذه التقنية في سبيل نشر الإسلام و ثقافة الإسلام في مختلف بقاع الأرض.

#### Paper ID 116

# مساهمة التصنيف الشجرى التصاعدى في التنقيب عن المعلومات المرتبطة بعلم التشفير [فاتحة سورة يوسف: "ألر " أنموذجا]

إدريس الخوشاف كلية العلوم- جامعة محمد الخامس-الرباط

الخلاصة: نتج عن تطوّر العلوم الرياضية التطبيقية المعلوماتية، ومنهجية الحصول على الخريطة العلمية (Data Maping) انطلاقا من البيانات والمعطيات المصطلحية القرآنية، تحوّل مهم في نوعية الأسلوب المستخدم في علم التصنيفات الشجرية الترتيبية، لجملة المعطيات المطروحة على شكل جداول كبيرة ( Big المصطلحية القرآن الكريم، ومعرفة معجزاته الممتدة في الآفاق. ولا ريب أن العناية بالمنهج العلمي التطبيقي الرياضي من أجل دراسة القرآن الكريم، ويفهم معانيه وعلومه بل وأحرفه، واستخراج قضايا لم ومخاصة ميدان الرياضيات المعلوماتية الخرائطية، له أهميته القصوى لمن أراد أن يعيد قراءة القرآن الكريم، ويفهم معانيه وعلومه بل وأحرفه، واستخراج قضايا لم يعرفها التاريخ من قبل، وفق الشروط اللازمة والكافية التي أمرنا بحا رب العالمين، لجعل عقيدة الإنسان الكونى، الذى سيرتبط بخالق هذا الكون، له حمولة معرفية كونية استخلافية ذات دلالة تطبيقية حضارية في الآفاق.

# الأسس الأخلاقية العامة في تقنية المعلومات اكرم محمد زكي , محمد زكي خضر

الخلاصة: لا شك أن الإسلام له الأثر الكبير على السلوك وحياة المسلمين، فالإسلام يمثل ظاهرة فريدة ليس فقط كتعاليم روحية بل إنه سلوك وقيم وأخلاق وعلاقات تشكل جميع جوانب حياة المسلمين. كما أن المبادئ الإسلامية ذات قيم سامية رفيعة تستحق الدراسة والبحث للوصول إلى حل للعديد من المشكلات الأخلاقية في العالم الحاضر. وحيث أننا من مستخدمي تقنية المعلومات، وحيث أن الكثير منها تطور في الغرب فإن معرفة وجهات النظر الغربية في أخلاقيات تقنية المعلومات مهمة بالنسبة لنا، قد تعكس المقارنة أمثلة لجالات أوسع في الحياة الإجتماعية. ويظهر واضحاً بإن استيراد التقنية قد يرافقه العديد من الأخلاقيات غير المناسبة للمجتمعات الإسلامية، وتكييف التقنية في البلاد الإسلامية قد يرافقها صراع بين الأخلاقيات القادمة معها والقيم المحلية. يركز هذا البحث على الجوانب الأخلاقية الإسلامية في مجال تقنية المعلومات.

#### Paper ID 120

# تكنولوجيا المعلومات في خدمة التراث الإسلامي

متن ابن عاشر نموذجا وليد مصطفى شاويش, ميادة محمود صالح كلية الشيخ نوح القضاة للشريعة والقانون حامعة العلوم الإسلامية العالمية عمان/ المملكة الأردنية الهاشمية

الخلاصة: تتمثل طبيعة المشروع في كونما محاولة لخدمة كتب التراث التي تم اعتمادها كتبا للتدريس سواء للمبتدئين أم المتوسطين أم المنتهين، بصورة علمية تستفيد من معطيات العصر الإلكترونية في تسهيل التعامل مع هذه الكتب ذات القيمة العلمية الكبرى، وهذا الكتاب هو: الحبل المتين على نظم المرشد المعين على الضروري من علوم الدين، للمراكشي، وهذا الكتاب يتضمن قسمين:

- 1. نظم شعري على المرشد المعين على الضروري من علوم الدين، لعبد الواحد ابن عاشر
  - 2. الحبل المتين وهو شرح محمد بن محمد المراكشي على النظم.

مشكلة البحث: كيف يمكن الاستفادة من التقنية الإلكترونية في حدمة التراث الإسلامي؟

أهمية البحث: تتمثل أهمية البحث في قدرته على تلبية حاجة مهمة للمعنيين بالتراث الإسلامي حيث يمكن أن يوفر تعليما مميزا يواكب التطور التقني الذي تشهده الإنسانية، ويوفر مادة علمية صالحة للتواصل عن بعد في مجال العلوم الشرعية.

# International Conference on Islamic Applications in Computer Science and Technologies

# (IMAN 2014)

Conference Venue: The Armed Forces Hotel, Tabarbour, Amman, Jordan

## **Conference Schedule**

## Day 1 (Sunday, 12 October 2014)

8.00 am	Registration
9:00 am	Opening Ceremony
9:10 am	Qur'an Recitation
9:20 am	Speech by Honorary Chair
9:40 am	Speech by General Chair
10:00 am	Multimedia Presentation
10:15 am	Presentation of Tokens of Appreciation
10:25 am	Du'a & Session closing
10:30 am	Tea Break
11:00 am	Keynote Speakers Session
	Keynote Speaker 1: Prof. Dr. Zaghloul El-Naggar Topic: Makkah, the mother of all cities
	Keynote Speaker 2: Prof. Dr. Kharchaf Idris Topic: Data mining and Database Analysis using Data Mapping Model:

Prophetic Letters to Heads of States

Keynote Speaker 3: Assoc. Prof. Dr. Mohamad Fauzan Bin Noordin Topic: Social Media and Advertising from Maqasid al-Syari'ah Perspective

Keynote Speaker 4: Dr. Omar Tayan

Topic: State-of-the-Art Multimedia Information Assurance Techniques and Issues for e-Quran ande-Hadith Learning and Propagation: A

Vision

12:50 pm Photo Session & Keynote Awards

1:00 pm Lunch and Salat

2:00 pm Session 1

3:30 pm Tea Break

4:00 pm Session 2

5:30 pm End of 1st Day Activities

## Day 2 (Monday, 13 October 2014)

9:00 am Session 1

10:30 am Tea Break

11:00 am Session 2

1:00 pm Lunch and Salat

2:00 pm Session 3

4:00 pm Tea Break

4:30 pm End of 2nd Day Activities

## Day 3 (Tuesday, 14 October 2014)

One day tour

# المؤتمر الدولي الثاني للتطبيقات الإسلامية في علوم الحاسوب وتقنياته إيمان 2014

# موقع المؤتمر: فندق القوات المسلحة، طبربور، عمان، الأردن

# برنامج المؤتمر

اليوم الأول (الأحد ، 12 تشرين الأول/ اكتوبر 2014)

8.00 صباحا التسجيل

9:00 جلسة الافتتاح

9:10 تلاوة من القرآن الكريم

9:20 كلمة جامعة العلوم الاسلامية العالمية

9:40 كلمة رئيس المؤتمر

10:00 عرض وسائط متعددة (ملتيميديا)

10:15 تبادل الهدايا

10:25 دعاء وختام الجلسة

10:30 استراحة

11:00 الجلسة الرئيسية: الكلمات الافتتاحية

المتحدث الأول: الاستاذ الدكتور زغلول النجار

العنوان: مكة، أم القرى

المتحدث الثاني: الاستاذ الدكتور إدريس الخرشاف

العنوان: التتقيب في المعلومات وتحليل البيانات باستخدام الخريطة الشجرية الرياضية: الرسائل النبوية

المرسلة لملوك ورؤساء الدول أنموذجا

المتحدث الثالث: الاستاذ المشارك الدكتور محمد فوزان بن نور الدين

العنوان: الإعلام الإجتماعي وصناعة الإعلانات من منظور مقاصد الشريعة

المتحدث الرابع: الدكتور عمر طيان

العنوان: رؤية عن تقنيات الحداثة لأمن المعلومات في إستخدام الوسائط المتعددة للتعليم الإلكتروني للقرآن الكريم وعلومه

12:50 تسليم جوائز تقديرية والتقاط الصور التذكارية

1:00 الغداء والصلاة

2:00 الجلسة الأولى

3:30

4:00 الجلسة الثانية

5:30 انتهاء فعاليات اليوم الاول

# اليوم الثاني (الإثنين، 13تشرين الأول/ اكتوبر 2014)

9:00 صباحا الجلسة الأولى

10:30

11:00

1:00

2:00

4:00

انتهاء فعاليات اليوم الثاني 4:30

## اليوم الثالث (الثلاثاء، 14تشرين الأول/ اكتوبر 2014)

رحلة سياحية

# First Day اليوم الأول

## Session 1, day 1 (12 October 2014), 2:00pm – 3:30pm

Room 1: (in English) Chair: Mohammed Al-Kabi Co-chair: Normala Rahim

Paper ID	Paper's title	Author(s)
51	Natural Language Interface for Quran	Aliyu Rufai Yauri, Rabiah Abdul-
	Knowledge Retrieval	Kadir, Azreen Azman and
		Masrah Azrifah Azmi Murad
77	A Hybrid Approach for Indexing and Searching	Ahmad Al-Taani, Ebtesam
	the Holy Quran	Abushareah and Faisal
		Alkhateeb
97	Simple Instruction of Structural Interpretation of	Bi Bi Zeinab Hosseini
	Baqare chapter using Tree diagrams	
103	A New Distributional Semantic Model for	Maha Alrabiah, Abdulmalik Al-
	Classical Arabic	Salman and Eric Atwell

Room 2: (in Arabic)

رئيس الجلسة: محمد نصر محمد

مساعد رئيس الجلسة: مُولاي إبراهيم الخليل غمبازة

Paper ID	Paper's title	Author(s)
116	مساهمة التصنيف الشجري التصاعدي في التنقيب عن	إدريس الخرشاف
	المعلومات المرتبطة بعلم التشفير: فاتحة سورة يوسف "ألر"	
	أنموذجا	
31	استخدامات الطلبة الناطقين بغير اللغة العربية للتعليم	ابتهاج راضي عبد الرحمن
	المحوسب وضرورته في تحصيل مادة التلاوة والتجويد	
90	تأثير التكنولوجيات الحديثة على الهوية الثقافية العربية: دراسة	وداد سميشي و آمنة قجالي
	في استخدامات الشباب للغات الهجينة	
11	تقنيات التعليم الإلكتروني للقرآن الكريم وعلومه	فرخة ليندة

## Session 2, day 1 (12 October 2014), 4:00pm – 5:30pm

Room 1: (in English)

Chair: Abdulmalik Al-Salman

Co-chair: Mohammad Rafie Hj. Mohd. Arshad

Paper ID	Paper's title	Author(s)
69	Quran Recitation Recognition in Digital	Omar Tayan and Yasser Alginahi
	Communications using Audio-Watermarking and	
	Biometric Signatures	
115	A Topical Classification of Hadith Arabic Text	Mohammed Al-Kabi, Heider
		Wahsheh, and Izzat Alsmadi
113	E-Tafseer: Plants and Animals from Al-Quran	Ahmad Muhaimin Mohamad,
		Farahwahida Mohd Yusof, Arieff
		Salleh Rosman, Tamar Jaya
		Nizar, Anazida Zainal, Mazura
		Md. Din and Zaidatun Tasir
27	Islamic and Quranic information on the Web:	Rita Zaharah Wan-Chik
	Information Retrieval challenges and User's	
	preferences	

Room 2: (in Arabic)

رئيس الجلسة: عبد الحميد عماري مساعد رئيس الجلسة: العوض أحمد

Paper ID	Paper's title	Author(s)
5	استعمال الأجهزة الصوتية الحديثة في خدمة علم التجويد	عادل أبو شعر
46	نظام فواصل الآيات القرآنية	مُولاي إبراهيم الخليل غمبازة ورفعت حسن
		الزنفلي
52	دراسة تحليلية لبرامج تعليم القرآن الكريم وعلومه من خلال	عبد الله بن علي وعبد الرحمن الشريف
	معابير التعليم الإلكتروني	كرار
73	الفكر الثقافي الإسلامي المعاصر والتقانة الحديثة	محمد نصر محمد
120	تكنولوجيا المعلومات في خدمة التراث الإسلامي: متن ابن	وليد مصطفى شاويش وميادة صالح
	عاشر نموذجا	

# **Second Day**

# اليوم الثاني

Session 1, day 2 (13 October 2014), 9:00am – 10:30am

Room 1: (in English) Chair: Majdi Sawalha Co-chair: Ahmed Bali

Paper ID	Paper's title	Author(s)
107	An Interpretation of Sura "Fussilat" using Tree	Neda Firuzabadi, Mojdeh Namin
	Diagram	and Hassan Rostami
111	3D Virtual Reality Using 360 degree Photography	Normala Rahim, Wan Malini
	for Umrah Training	Wan Isa, Azilawati Rozaimee,
		Nazirah Abd Hamid, Siti Dhalila
		Mohd Satar, Jamalluddin Hashim
		and Wan Ismail Wan Abdullah
99	Recognizing culture based religious icons from	Zan Azma Nasruddin and
	muslim culture user interface design (MCUID)	Husnayati Hussin
	prototype	
64	Teaching Dzikir Through 2D Games	Norkhairani Abdul Rawi, Maizan
		Mat Amin, Azilawatie Rozaimee
		and Wan Malini Wan Isa

Room 2: (in Arabic)

رئيس الجلسة: إدريس الخرشاف مساعد رئيس الجلسة: عادل أبو شعر

Paper ID	Paper's title	Author(s)
13	تقنية المعلومات ودورها في خدمة الاسلام: بالاشارة الي المركز	العوض أحمد
	القومي للبحوث– الخرطوم	
62	تطبيقات تكنولوجيا المعلومات في تدريس التربية الإسلامية	ميمونة الزدجالي
80	تطبيق ذكي لمساعدة المفتي	عبد الحميد عماري
14	العلوم الإسلامية في مختبرات إلكترونية	ماجد أبو غزالة
119	الأسس الأخلاقية العامة في تقنية المعلومات	أكرم محمد زكي و محمد زكي خضر

## Session 2, day 2 (13 October 2014), 11:00am – 1:00pm

Room 1:

Chair: Mohamad Fauzan Noordin

Co-chair: Zafar Ahsan

Paper ID	Paper's title	Author(s)
16	Semantically Answering Questions from the Holy	Samir Tartir, Hashem Shmaisani,
	Quran	Ammar Al-Na'san and Moath
		Naji
26	Building a Virtual Union Catalog for Arabic	Abdul Kabir Hussain Solihu,
	Journal Articles in Malaysian Libraries Using	Yushiana Mansor, Normi Sham
	Open Source Solutions	Awang Abu Bakar, Mohd.
		Feham Md. Ghalib and
		Mohammed Al Haek
101	Proposing the Research Program for Developing	Amirrudin Kamsin
	the Novel Quran and Hadith Authentication	
	System	
37	Comparing Arabic NLP tools for Al-Hadith Al-	Kaouther Faidi, Raja Ayed,
	Shareef Classification	Ibrahim Bounhas and Bilel
		Elayeb
58	Teaching and Learning Ways Used by Prophet	Rayan Alkhayat, Mohammad
	Mohammad P.B.U.H and Their Possible	Rafie Hj. Mohd. Arshad and
	Implementation in Modern Learning	Esraa Alobaydi
	Technologies.	

## Room 2:

Chair: Roslina Othman

Co-chair: Noor Widasuria Abu Bakar

Paper ID	Paper's title	Author(s)
86	Text Analytics and Transcription Technology for	Majdi Sawalha, Claire Brierley,
	Quranic Arabic	Eric Atwell and James Dickins
104	Global E-health application in Hajj Season or E-	Rasmeh Al-Huneiti, Ziad
	health initiative during Hajj season	Hunaiti, Mohammed Al
		Masarweh and Zayed Huneiti
108	Special Education Application for Children with	Hasmiza Othman, Salwani Mohd
	Autism: The Salat Application	Daud and Hafiza Daud
42	An LMF-based Normalization approach of	Nadia Soudani, Ibrahim Bounhas
	Arabic Islamic dictionaries for Arabic Word Sense	and Bilel Elayeb
	Disambiguation: application on Hadith	
23	Speech Recognition Incorporation in a Multiple	Ahmed Al-Aidaroos, Ariffin
	Input Modality Mobile Application for Pilgrims	Abdul Mutalib and Abdul Nasir
	(MDZ4H)	Zulkifli

## Session 3, day 2 (13 October 2014), 2:00pm – 4:00pm

Room 1:

Chair: Norkhairani Abdul Rawi Co-chair: Rasmeh Al-Huneiti

Paper ID	Paper's title	Author(s)
53	ELGG as an Assessment Tool in Teaching and	Mohd Firdaus Yahaya and Mohd
	Learning Arabic Language	Feham Md. Ghalib
48	Customizing CRM model for Entrepreneur Loan	Noor Widasuria Abu Bakar and
	Management	Shahrulniza Musa
32	Semantic Annotation of Quranic documents	Imane Ayachi Amor and Ahmed
		Bali
39	Automatic Knowledge Base Constructor for Al-	Mohamad Fauzan Noordin,
	Quran Retrieval System	Sharyar Wani, Tengku Mohd
		Tengku Sembok and Roslina
		Othman
55	Self-Help MAQAM-Based Search System	Roslina Othman

Room 2:

Chair: Abdul Kabir Hussain Solihu Co-chair: Ahmed Al-Aidaroos

Paper ID	Paper's title	Author(s)
29	An Incremental Knowledge Base Dedicated to	Ahlem Benchennaf, Dalila
	Muslim Worship	Boughaci, Mohamed Boudehane
		and Nassim Messaadia
22	The Qur'an and Theories of the Universe	Zafar Ahsan
78	Automatic Qur'an Reciter	Majdi Sawalha, Laila Al-Humssi,
		Raya Momani and Sereen Al-
		Saber
109	The State of Online Audio Qur'an and Its Public	Akram Zeki
	Perception	

# والحمد الله ربب العالمي