International Conference of Modern Applications on Information and Communication Technology (ICMAICT), University of Babylon, Babylon, Iraq

Ahmed J. Obaid¹, Salah Albermany², Bassma H. Hamad³, Hiba A. Ahmed⁴

¹,²Faculty of Computer Science and Mathematics, University of Kufa, Najaf, Iraq.
³Alkarkh University of Science, Iraq
⁴Dept of Mathematics, Baghdad University, Iraq

E-Mails: ahmedj.aljanaby@uokufa.edu.iq, salah_albermany@uokufa.edu.iq

ICMAICT Proceedings volume involved the contributions that were presented through the Second International Conference of Modern Applications on Information and Communication Technology (ICMAICT), which has been held at University of Babylon, Iraq(http://maict.info), at 22-23 October 2020, ICMAICT also hosted sessions from Koneru Lakshmaiah Education Foundation, Department of Electronics and Communication Engineering for their events International Conference on Innovations in Electronics, Communication, Computing & Automation (ICIECCA) The Conference provided a forum for discussion and sharing the knowledge and recent studies in many Fields and Subjects among Researchers, Academics Participants, Lecturers, and other Communities.

ICMAICT focused on the Aspects of Computing and Security Systems, Global Economy and Statistics, Communication and Networking, Mathematics and Information Theory, where the received papers come from the authors who working in academics centers, universities, research institutes, corporations, industries, and other agencies. General public theme of ICMAICT is to explore the recent techniques and technologies in the field of Information Technology, Computing, Information Theory, Security systems, and mathematics. ICMAICT also hosted sessions in Nano Technologies, IoT, Biomedical Systems, Hyper-Modal Signal Processing, Wireless Communication Technologies, Networks & Big Data Applications, Electromagnetic, RF, Microwave and Wearable Technology, Sciences. The conference has been a great opportunity for participants coming from UK, Turkey, Nepal, Philippines, Australia, Egypt, Lebanon, Algeria, Iran, India, Pakistan, Malaysia, and Many other Countries to present and discuss topics in their respective research areas.

ICMAICT-20 conference hosted6 plenary sessions and invited speakers, and also oral and poster presentations to allow as many as possible attendances to present their scientific results on the different fields. The manuscripts which have presented were published in the IOP Conference Series: Journal of Physics under the peer-reviewed process. We love to express our gratitude for all of the participants, keynote speakers, and guests of honor, for their effective contribution in our conference and these proceedings. We also, acknowledge University of Babylon, Dijla Co. Pvt. Ltd., for their
hospitality and sponsoring the conference. Furthermore, would like to thank SICC Center for their supports. Our ongoing thankfulness is presented for our Chairs, Guest editors and Speakers.

**Venue of the Conference**

The conference has been organized virtually in university of Babylon, Babylon, Iraq, in 22-and 23 October 2020. ICMAICT-2020 is the extended version of our past conference MAICT-19 which held in 2019 at IKC college, Baghdad, and can be visited through the link of (www.info-comm.tech). University of Babylon aims through its scientific departments at preparing a generation of students armed with knowledge and looking forward to building their country according to the new scientific developments. The university endeavors towards making use of them in an appropriate cultural means as well as building good and new scientific establishments for the sake of developing the present through scientific research. The main organizer of MAICT conference is SICC center and this year organized with the cooperation of Dijla Jewel Co. Pvt. Ltd., and TCIA Foundation.

**The reason(s) why ICMAICT conducted virtually:**

Due Covid-19 Pandemic Situation recently affected on many countries and still the situation of this Pandemic is very dangerous, and due to incredible Number of cases of the peoples that infected by Covid-19 in the world and in Iraq, and due to the World Health Organization and Ministry of Health Recommendations, the conference organizers decided to conduct and held this conference Virtually to keep the life of participants and also due the challenges of lock down. Conduct ICMAICT virtually bring huge number of participants that non expected due many peoples are unable to attend conference physically, attend our online Conference due the friendly uses of Virtual Software without spending money for flight tickets or other matters to attend the conference. However, we feel this conference achieved our goal by inviting very attractive authors who are seeking for attending conferences the focused in modern application inf IT and recent technologies, and even Covid-19 there but the scientist always seeking for the reputed events like ICMAICT. The organizing committee have achieved these tasks and all sessions organizing in University of Babylon they attend physically to use the University of Babylon infrastructure to achieve this task Successfully.

**Technology, technical difficulties and drawbacks of conference virtually.**

ICMAICT Conference Consider the ZOOM Meeting Software as the main software to conduct this conference, as the Main Software for delivering the Session discussions and Meeting information to all participants in Iraq and Other countries. The main advantages of this Technology is to reduce the time and space when someone would like to attend any scientific event and also broken the limitations for the peoples and authors who would like to attend this event from far away countries, in which the provide a facility to provide a platform that able to manage and control large number of participants is the main challenge of choosing the best software, we find Zoom meeting is the best software that fulfill our requirements and provide amazing virtual platform to manage our authors and participants through our conference sessions.

The main technical difficulty in virtual software is the internet connection, due to covid-19 band, many peoples sitting at home and many jobs transformed from physical to virtual mode, However, internet connection and ISP infrastructure may affected due the large number of traffic devices that join to the network recently and may the ISP companies do not have good infrastructure to provide stable connection through the meeting or sessions. Hence, we conducted our sessions in the early morning time where the Babylon university and SICC, TCIA and Dijla Jewel Pvt. Ltd. Infrastructure used to achieve this task successfully. With Blessing of God, we held this conference successfully without any issue and we are looking to conduct this conference in future in physical manner after the world remedy from this pandemic.
The main technical difficulties of Virtual Meetings can be summarizing as follow:

Virtual Technique that use to achieve this task, many software can be used to achieve this task, which can be offer through many companies either free or paid own services. The main challenge to use online technique is to find the good software that able to manage large number of attendees with varied number of traffic data, we feel that the internet connections is the main source for any challenge in any online event. However, if the internet connection became slow, where many users are forced to exit and rejoin many times through the session. So many software's can used to achieve high quality meeting, need some certain limitations, like number of users, to keep the bandwidth little good, however not all interested peoples can attend meeting, difficulty of join and attend the meeting rooms, view and share the content, etc.

Drawbacks of virtual conference, we do not feel the virtual conference have much drawbacks than physical conferences, in which many peoples can avoid many fees payment for travels and hosting, registration fees, as well as flight tickets in which virtual conferences gives free offer for all the above issues. Another thing is, some famous figures and professors can easily join and attend without consider their fees in which they can attend and speak for hours when they sitting at home.

The main drawback we feel that if some authors would like to visit the conference venue for direct discussion and made good collaboration, so virtual meeting can also achieve this task easily, at the current time where all world suffer from Covid-19 pandemic.

Conference Chairs
- PROF. DR. Kahtan Aljebory, The President of University of Babylon, Honorary Conference Chair, Iraq.
- Prof. Dr. Isam Mejbel Abed, Scientific assistant of President of Babylon University, Honorary Chair.
- A.Prof. Dr. Wesam A. Shehab, Asst. Professor at University of Kufa, Chairman of TCIA Foundation, Najaf, Iraq.
- Prof. Dr. Mufeed Jalil Ewadh, Director of Scientific Committee, University of Babylon, Babylon, Iraq.
- Dr. Ahmed J. Obaid, Main Chair of Publication in ICMAICT conference.

Honorary and Invited Conference Chairs
- Er. K. Satyanarayana, President, KLEF
- Er. K. L. Havish, Vice-President, KLEF
- Er. K. Raja Harin, Vice-President, KLEF
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- Dr. N. Venkatram, Pro-Vice-Chancellor, KLEF
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- Dr. K. Subbarao, Principal, K L College of Engineering, KLEF
- Dr. V. K. Mittal, Professor & Chair, Department of ECE, KLEF
- Dr. M Suman, Head, Department of ECE, KLEF

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- Prof Dr. Wesam S. Bhaya, Professor at College of Information Technology, Head of Organizing Committee.
- Prof. Dr. Mufeed Jalil Ewadh, Director of Scientific Committee, University of Babylon, Babylon, Iraq.
- Dr. Ahmed Jabbar Obaid, Lecturer at Faculty of Computer Science and Maths, Head of Secretariat Board.
- Asst. Prof. Dr. Mehdi M. Manee, Asst. Professor at College of Information Technology, University of babylon, Iraq.

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• Prof. Dr. Sandeep Kautish, Session chair of Track 1: Computing and Security Systems.
• Prof. Dr. StezhoNadiia, Session chair of Track 2: Global Economy and Statistics.
• Prof. Abhishek Bhattacharya, Session Chair of Track 3: Communication and Networking.
• Prof. Alex Khang, Session Chair of Track 4: Mathematics and Information Theory.

Invited Speakers

• Prof. Dr. Adriana Schiopoiu, Professor of Management at the University of Craiova, Romania, Adriana Burlea-Schiopoiu currently works at the Department of Management, Marketing and Business Administration, University of Craiova. Adriana does research in Behavioural Economics, Business Administration and Business Ethics. Their current project is ‘Corporate Social Responsibility’. Prof. Adriana give the first speak session for the topic entitled Pandemic Crisis – A Challenge for the Ethics Embedded in Emerging Technologies, for more information about Prof. Adriana please visit: https://www.researchgate.net/profile/Adriana_Burlea-Schiopoiu.

• Associate Prof. (Dr.) Souvik Pal, Head of the Dept. of CSE, Global Institute of Management and Technology, West Bengal, India. Dr. Souvik Pal is currently an Associate Professor and HoD in the Department of Computer Science and Engineering, Global Institute of Management and Technology, West Bengal, India. He is author / Co-editor of 11 Books from reputed publishers like Elsevier/Springer/CRC Press/Wiley and he is owner of 03 patents. He is the series editor of Scrivener-Wiley Publishing, USA. He has been invited as a Keynote Speaker in ICICCT 2019, Turkey; ICTIDS 2019, Malaysia. Dr. Souvik present a speak session about cloud computing and IOT, for more information please visit: https://www.researchgate.net/profile/Souvik_Pal6.

• Prof. Dr. Hemant K. Gianey, Thapar Institute of Engineering and Technology, India, Hemant Kumar Gianey is an Assistant Professor of Computer Science at the Computer Science & Engineering Department, Thapar Institute of Engineering & Technology, Patiala, Punjab, India. Dr. Gianey also worked as a postdoc researcher in National Cheng Kung University of Taiwan. Prof. Gianey has published many reputed journal/conference papers and two international books. He has served as guest editor in several prestigious journals. Prof Gianey is active in delivering keynotes and invited talks. His research interests are (big) data analytics and machine learning. For more information please visit: https://www.researchgate.net/profile/Hemant_Gianey3.

Organizing Institutions

• University of Babylon, Babylon, Iraq.
• Statistical and Informatics Consultation Center (SICC), Faculty of Computer Science and Mathematics, University of Kufa, Iraq.
• Dijla Jewel Co. Pvt. Ltd, for conference management and Academic Services.
• TCIA foundation for Culture, Intellect and Arts.
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Conference Flyers and Posters:
The Best Papers that Selected on Day 1 and Day 2:
Screen Shoots of Day 1 and Day 2 Using (ZOOM) :
With our pleasure to attend our next conferences in Future

Dr. Ahmed J. Obaid
Conference Coordinator