

- Text must be single-spaced.
- Subheadings must be 16 points and bold.
- Must include an ABSTRACT (80 - 150 words in length).
- Submission all proposals and papers must be submitted to the following email address of the organizer of the conference.
- All submitted papers must be electronically in MS Word and submitted electronically.
- The submitted papers must be carefully checked for correct grammar, and spelling. - Submitters should use the Conference Former President email addresses [hadimm1964@hotmail.com],[esisact_08@yahoo.com]and [melhadi@yalla.com].
- All submissions will undergo a double-blind peer review by at least three external scholars reviewers.

VI. Preliminary Deadlines Dates for Abstracts and Reports:

Abstracts/Full-Text Paper Submission Deadline
Thursday 13 February 2020

Final Deadline of Paper Reports Submission, Thursday
19 March 2020

All research papers will be refereed

VII. Scientific Referee Committee:

The scientific referees committee is composed of the following scholars:

- Prof. Mohamed M. El Hadi, Prof. of Computer and Information Systems
Sadat Academy, and E.SISACT Former President
- Prof. Mohamed Fahmy Tolba, Prof. of Computer Science, Faculty of
Information and Computer, Ain Shams University, and Former Vice
Former President of Ain Shams Univ., and ESISACT Member
- Prof. Allaa Mohamed El Ghazali, Prof. of Computer and Information Systems
Sadat Academy, and Former SAMS Former President, and ESISACT
Vice Former President.
- Prof. Neveen Makram, Head of the Dept. of Computers and Information
Systems, Sadat Academy for Management Sciences

VII. Conference Participants and Fees:

All conference participants, including presenters and attendees must register for the conference, and are

urged to pay the appropriate voluntary registration fee as follows:

- o Interested individuals 100 Egyptian pounds for each Egyptian participant and 300 US\$ for non-Egyptian citizens.
- o Faculty staff and trainers 50 Egyptian pounds for each person.
- o ESISACT and other Egyptian non-governmental organization members 50 Egyptian pounds for each.
- o University and higher institution students 50 Egyptian pounds each.
- o Presenters and submitters of research papers and presentation reports 300 Egyptian pounds for each paper or report for Egyptians, and 300 US \$ for foreigners.
- o Organizations, institutions, companies and banks membership for 3 persons 300 Egyptian pounds for each organization.
- o Organizations, institutions, companies and banks sponsoring the
Conference at least 5000 Egyptian pounds for each at least.

VIII. Conference Sponsor and Exhibitor Opportunities:

The Conference offers the opportunity to become a conference sponsor or exhibitor. To participate as a sponsor or exhibitor, therefore we invite organizations interested to offer their wildlings to share and support the convening of this crucial conference.

CONTACTS:

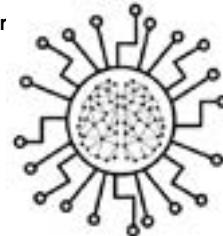
Prof. Mohamed M. El Hadi, Former President of (ESISACT).

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We have yet to grasp fully the speed and breadth of this new revolution. We are already witnessing profound skills across all industries, marketed by the emergence of new business models, the disruption of incumbents and reshaping of production, consumption, transportation and delivery system. On the societal front, a paradigm shift is underway in how we work and communicate, as well as how we express, inform and entertain ourselves.

Equally, governments and institutions are being reshaped, as are systems of education, healthcare and transportation among many other sectors. New ways of using technology to change behavior and other systems of production and consumption also offer the potential for supporting and preservation of natural environments, rather than hidden costs in the form of externalities.

Within this context, the modern world is experiencing unprecedented change, driving by the technological shift of both artificial intelligence and the 4th Industrial revolution. We are living nowadays in an interconnected system of systems. Disruption is not confined to individual industries, countries or regions: impact entire global structure.

Therefore, what is the artificial intelligence? The Artificial Intelligence (AI) is the intelligence exhibited by machines or software. It is also the name of an academic field of study that is a branch of computer science, which investigates how to create computers and computer software that are capable of intelligent behavior. Therefore, AI is considered the simulation of human intelligence processes by machines, especially computer systems. These processes include: learning (the acquisition of information and rules for using the information); reasoning (using rules to reach approximate or definite conclusions); and self-correction. Particular applications of AI include Expert Systems, Speech Recognition and Machine Vision. Also, AI can be categorized as either weak or strong. Weak AI also known as narrow AI, is an AI system that is designed and trained for a particular task. Virtual personal assistant system with generalized human cognitive abilities. When presented with unfamiliar task, a strong AI system is able to find a solution without human invention.

AI is important because it can help solve immensely difficult issues in various industries, such as education, health, commerce, transport, utilities and entertainment. Hence, AI applications are related to the following:

- Reasoning, the ability to solve problems through logical deduction.
- Knowledge, the ability to present knowledge about the sur-

rounding world.

- Planning, the ability to achieve goals and objectives.
- Communication, the ability to understand spoken and written language.
- Perception, the ability to infer things about the world via sounds, images, and other sensory input.

Recently, advances in AI technology and related fields have opened up new markets and opportunities for development and progress in critical areas such as health, education, energy, academic studies, economic inclusion, social welfare and environment. In recent years, machines have surpassed humans in performance of certain tasks related to intelligence, such as aspects of image recognition, expert forecast that rapid in the field of specialized AI will continue.

The recent advances of AI have been related to the following three main factors:

- Access to big data generated from e-commerce, businesses, governments, science, social media, etc.
- Improvement in machine learning algorithm area to the availability of large amounts of data.
- Creates computing power and the rise of cloud based services, which helps run sophisticated machine learning algorithms.

AI already contributed to generation of recent technologies such as the Internet of Things, Blockchain, 3D printing, etc. that already have profound impact for the emergence of the 4th Industrial Revolution that we are witnessing nowadays. What is the 4th Industrial Revolution? It is an inclusive mental model, a societal transformation toward adapting new emerging frontier technologies, emerging new industrial models, and a systemic governance challenge. The 4th IR therefore, is all about the technologies they determine the future. It is overwhelming us, and we can only accept it to survive in the years ahead.

These frontier and emerging technologies often a multitude of opportunities to re-imagine how our economies could serve social and environmental needs. They relate mainly to the AI and the 4th Industrial Revolution that already have great impact and implications on the society and national sustainable development that it would be prudent for Egyptian government to be prepared and put effective policies in place to cope with them, which are already embark on within the policies of building a digital society and benefiting from the recent frontier technologies.

II. Conference Objectives:

This 27th Scientific Conference for Information Systems and

Computer technology on "AI impact and implications on the 4th Industrial Revolution and Applications in the Egyptian Situation" is aiming to provide an excellent forum for sharing knowledge and results in theory, methodology and applications of AI and the 4th Industrial Revolution and their impact and implications on the national development. The purpose of the conference is to provide a platform to researchers and practitioners from both the academic as well as industry to meet and share cutting-edge development in both AI and the 4th IR.

III. Conference Themes:

The conference is to present research works, projects surveying works and industrial experiences that describe significant advantages in some of the following areas:

- AI Tools and Applications
- Knowledge-based systems
- AI and Big Data
- Economics of AI-Driven Automation
- Major Technologies-Driven the 4th Industrial Revolution,
- AI and the 4th IR impact and Implications on Employment, Skills and Future Data Revolution for National Planning and Sustainable Scenarios.
- AI and the 4th IR Impact and Implications on Employment
- The Future of Jobs Due to the Adoption of AI and the 4th IR
- Adoption of the 4th Industrial Revolution and Its impact on the Society
- AI and the 4th IR impact and Implications on Education
- AI and the 4th IR Impact and Implications on Healthcare
- AI and the 4th IR impacts on Defense and Security

IV. Call for Contributions:

All interested researchers and practitioners are kindly encouraged to contribute to and help shape the conference through submissions of their research abstracts, papers and posters. Also, high quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of Business Intelligence, Analytics, and digital transformation are cordially invited for presentation at the conference. The conference solicits con-

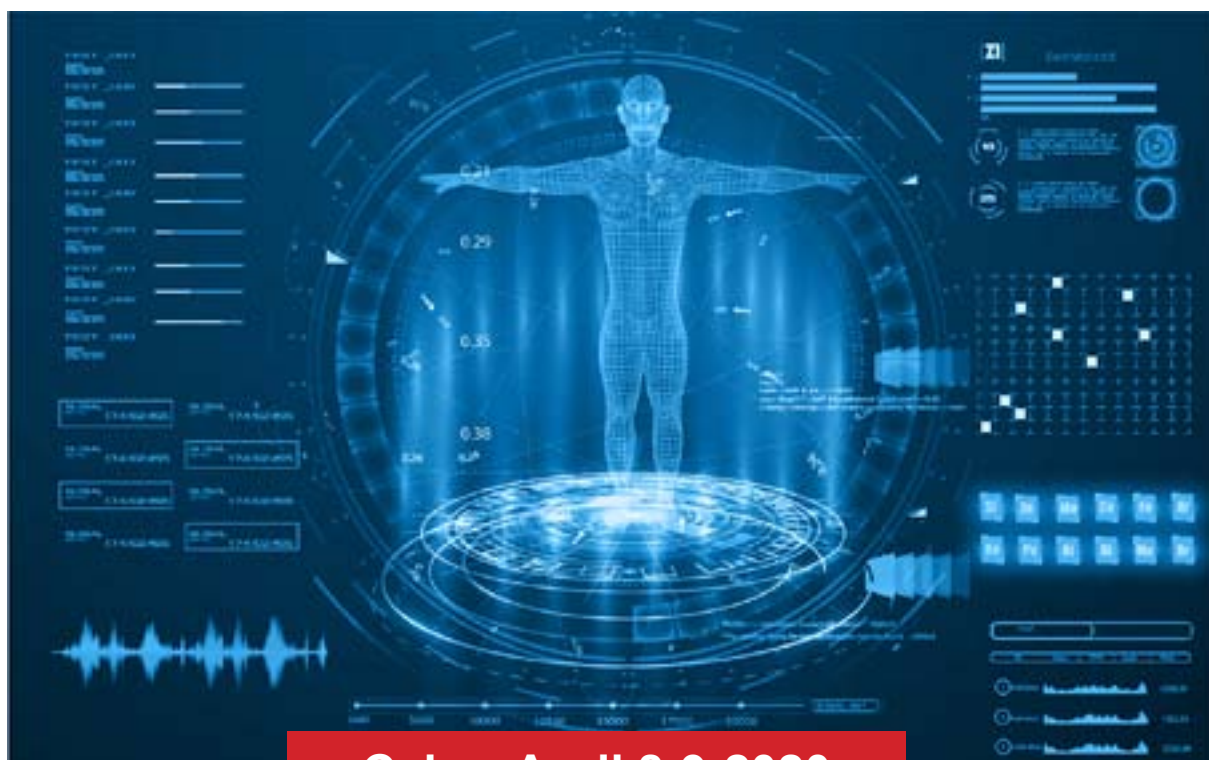
tributions of abstracts, papers and posters that address themes and topics of the conference, including figures, tables and references of novel research materials.

Papers' submissions for the 26th. Scientific Conference are to be made in the following categories:

- Full-length submissions: Interested experts and researchers may submit a full-length original and previously unpublished conceptual or empirical research manuscript for review and decision. Accepted papers will be published in the conference proceedings.
 - Research-in-progress submissions: Interested individual researchers who are engaged in postgraduate studies or occupied in research projects for certain enterprises are urged to submit their research plans or projects in progress outcomes.
 - Abstracts: All the above submitters of papers should provide and present abstracts of their papers of no more than 100 words indicating the key words to be utilized in the intended papers.
 - Paper manuscript Guidelines:
 - Manuscripts of full length and in-progress papers should not exceed 15 pages, around 10000 - 15000 words.
 - Papers must be accompanied by a separate cover letter with every author (s) names, address, phone and fax numbers, email, full affiliation, the track or theme to which it is submitted. All correspondences will be sent to the first author unless otherwise specified.
 - Submitters must provide their email address where the Acknowledgement will be forwarded.
 - The paper manuscript must contain, in its first page, the paper title, the author (names, an abstract and a list of keywords).
- ## V. Format for the Proposed and Full Paper:
- Paper A4 size.
 - Margins must be 1 inch.
 - Font Face must be "times New Roman" for the Papers written in English, and must be "Simplified Arabic" for the Papers written in Arabic language.
 - Font size must be 14 points (Except Paper Title is 18 point and bold).

The 27th Scientific Conference for Information Systems and Computer Technology

Artificial Intelligence Impact and Implications on the 4th Industrial Revolution and Applications in the Egyptian Development



Cairo: April 8-9-2020

I. Introductory Background:

We are at the beginning of a revolution that is fundamentally changing the way we live, work and relate to one another. In its scale, scope and complexity, what is considered mainly is the Artificial Intelligence Impact and Implications on the 4th Industrial Revolution applications that are unlike anything humankind has experienced before.