28th International Conference on Computer Theory and Applications

ICCTA 2018

30 October - 1 November 2018
Alexandria, Egypt

Conference Program

Day 1

Tuesday, October 30th, 2018

DAY 1 - Tuesday, October 30th, 2018
Venue: *AASTMT Presidency Building, AbuQir*

09:30 Registration

10:30 Opening Session

"Recent Technology Trends"

H.E. Prof. Dr. Yousry El Gamal
Former Minister of Education
President, Computer Scientific Society

11:30 Coffee Break

12:00 Keynote Speech

Microsoft Presentation

Mr. Khaled Abdel Kader
General Manager, Microsoft Egypt

12:45 Keynote Speech

**"Autonomous and Connected Electric Vehicles
Deployment in Smart Cities"**

Prof. Dr. Hussein Mouftah
Tier 1 Canada Research Chair and
Distinguished University Professor

School of Electrical Engineering and Computer Science
University of Ottawa, Ottawa, Ontario, Canada

13:30 Keynote Speech

**"Evaluating a System's Effectiveness with
Approximate Data"**

Prof. Dr. Michael Gr. Voskoglou
Professor Emeritus of Mathematical Sciences
School of Technological Applications
Graduate Technological Educational Institute of Western
Greece, Greece

14:15 Keynote Speech

Knowledge Engineering Paradigms in Smart Education:
Methodologies, Applications and Challenges

Prof. Dr. Abdel-Badeeh M. Salem
Professor of Computer Science
Head of Artificial Intelligence and
Knowledge Engineering Research Labs

Faculty of Computer and Information Sciences
Ain Shams University, Cairo, Egypt

15:00 Lunch

End of ICCTA 2018 - Day 1 Activities

Day 2

Wednesday, October 31st, 2018

DAY 2 - Wednesday, October 31st, 2018
Venue: *Farsi Hall, College of Engineering and Technology, AbuQir*

9:30 - 12:00

Session I **Cloud Computing, Big Data, and Security**
Chairs: Prof. Dr. Ayman Abdel-Hamid and Prof. Dr. Ahmed Abou Elfarag
Full Papers:
CloudWar: A New Schema for Securing and Querying Data Warehouse Hosted in The Cloud **Kawthar karkouda, Ahlem Nabli, and Faiez Gargouri (University of Sfax, Tunisia)**
Modified Elliptic Curve Cryptography in Wireless Sensor Networks Security **Mohamed Abd El Hafez Bakr, Amr Mohamed Mokhtar (Alexandria University, Egypt), and Ali El Sherbini Takieldeen (Delta University, Egypt)**
Performance Comparison of Intrusion Detection Machine Learning Classifiers on Benchmark and New Datasets **Mohammed F. Suleiman (Teesside University, United Kingdom) and Biju Issac (Northumbria University, United Kingdom)**

Session I Cloud Computing, Big Data, and Security
Unclonable key Generator Based on Chip signature and SRAM-PUF of ATmega328P chip **Amr Elmestekawi, Ashraf Tammam, and Hanady Issa (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Secure Translation Using Fully Homomorphic Encryption and Sequence-to-Sequence Neural Networks **Michael Lahzi Gaid, Mohamed Waleed Fakhr, and Gamal Ibrahim Selim (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Enhancing AES Algorithm with DNA Computing **Omar G. Abood (Alexandria University, Egypt), Saleh Mesbah (Arab Academy for Science, Technology and Maritime Transport, Egypt), and Shawkat K. Guirguis (Alexandria University, Egypt)**
Evaluation of Virtual Machine Scheduling Algorithms within Cloud Environment **Nawel KORTAS and Habib YOUSSEF (University of Sousse, Tunisia)**

Session I
Cloud Computing, Big Data, and Security
Caching Techniques for Flight Delays Prediction in Big Data Using SparkR **Ahmed Elsayed, Mohamed Shaheen, and Osama Badawy (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

Venue: *Farsi Hall, College of Engineering and Technology, AbuQir*

12:00 Coffee Break

12:30 - 15:00

Session II Information Systems and Intelligent Systems
Chairs: Prof. Dr. Mohamed Shaheen and Prof. Dr. Mohamed Kholief
Full Papers:
Towards a Multidimensional Model for Terrorist Attacks Analysis and Mining **Firas Saidi (National School of Computer Sciences, Tunisia), Zouheir Trabelsi (UAE University, UAE), and Henda Ben Ghezala (Natinonal School of Computer Sciences, Tunisia)**
Multi-step Ahead Time Series Prediction via Bagging Trees Based Neighborhood **Ahmed R. Elshami, Aliaa Youssef, and Mohamed W. Fakhr (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

Session II
Information Systems and Intelligent Systems
Predictive Analytics for Loan Default in Banking Sector Using Machine Learning Techniques **Salma Khaled Shaheen and Essam ElFakharany (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

Short Papers:

A Modified Multinomial Platform Architecture for Computer Adaptive Testing (CAT) **Farida Orabi, Essam Kosba, and Walid AbdelMoez (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Improving Performance of Robust and Efficient E-Learning Platform using Distributed Computing Technologies for Saudi Arabia's institutes **Hassen Hamdi (Taibah University, KSA - University of Sfax, Tunisia), Walid Dabour (Menoufia University, Egypt) and Maher Khemakhem (University of King Abulaziz, KSA - University of Sfax, Tunisia)**
The Impact of Using Inbound Open Innovation Product Platforming by Egyptian SMEs on New Software Product Introduction **AbdelMalek Mohamed ElBarrawy (Savvy Arabia Company, Egypt)**

Session II **Information Systems and Intelligent Systems**
Enhance Job Candidate Learning Path using Gamification **Lamiaa Mostafa (Arab Academy for Science, Technology and Maritime Transport, Egypt) and AbdelMalek Mohamed ElBarrawy (Savvy Arabia Company, Egypt)**
Gamified Mathematics Learning for K 12 **Mona Saad, Essam Kosba, and Khaled Eskaf (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

15:00 Lunch

End of ICCTA 2018 – Day 2 Activities

Day 3

Thursday, November 1ˢᵗ, 2018

DAY 3-Thursday November 1st, 2018
Venue: *Farsi Hall, College of Engineering and Technology, AbuQir*

9:30 - 12:00

Session III **Computers in Industry and Scientific Computing**
Chairs: *Prof. Dr. Moustafa Hussein and Prof. Dr. Ahmed Farouk*
Full Papers:
Modeling Municipal Solid Waste Management System with Consideration of the Informal Sector **Amr El-Banna, Noha M. Galal, and Aziz E. El-Sayed (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Neuro Fuzzy DC-DC Converter **Mohamed Sherif Nabil (Arab Academy for Science, Technology and Maritime Transport, Egypt), Mohamed Misbah ElKhatib (Military Technical College, Egypt), and Ashraf Tammam (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
A New Approach for Pressure Sore Prevention **Ahmed Ezzet, Ahmed El-shenawy, and Ezz El-Din Zakzouk (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

Session III
Computers in Industry and Scientific Computing
DNA Computing Modeling of HEMT transistor Noise Parameters **Roshdy AbdelRassoul, Abd El-Menem Abd El-Bary, and Aya Mohamed El-Ebshihy (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Application of the Grey System Theory to Assessment with Approximate Data **Michael Gr. Voskoglou (Graduate Technological Educational Institute of Western Greece, Greece)**
Numerical Solution of One Dimensional Generalized Thermoelastic Problem by Using Adomian's Decomposition Method and Laplace's Transform Method **Hamdy M. Youssef (Umm Al-Qura University, KSA) and Alaa A. El-Bary (Arab Academy for Science, Technology and Maritime Transport, Egypt)**
Short Papers:
Application of Pattern Recognition Algorithms in Assessing Phytoequivalency of Phytomedicines using NMR Metabolomics Data: A Case Study of Artichoke **Amira Khattab (Arab Academy for Science, Technology and Maritime Transport, Egypt) and Mohamed Farag (Cairo University, Egypt - The American University in Cairo, Egypt)**

Session III
Computers in Industry and Scientific Computing
A Computer Simulator to Study the Effect of the Spiral Curves on Driver's Speed Behavior on Two-Lane Rural Highway **Mohmmed Foda (Arab Academy for Science, Technology and Maritime Transport, Egypt), Alfonso Montella (University of Naples, Italy), and Noureldin Sheta (Arab Academy for Science, Technology and Maritime Transport, Egypt)**

12:00 Coffee Break

End of ICCTA 2018 Activities

ICCTA 2018 Committees

Honorary Chair
Prof. Dr. Ismail Abdel Ghafar Ismail Farag
President, Arab Academy for Science, Technology, and
Maritime Transport (AASTMT), Egypt

Conference Chair
H. E. Prof. Dr. Yousry S. El-Gamal
Former Minister of Education
President, Computer Scientific Society

Conference co-Chair
Prof. Dr. Alaa Abdel Bary
Vice President for Postgraduate Studies and Scientific
Research, AASTMT

Conference Coordinators and Program co-Chairs
Prof. Dr. Ayman Abdel-Hamid, AASTMT, Alex., Egypt.
Dr. Essam Kosba, AASTMT, Alex., Egypt.

Organizing Committee
Prof. Dr. Khaled Mahar, AASTMT, Alex., Egypt
Prof. Dr. Ahmed Farouk, AASTMT, Alex., Egypt
Dr. Mahmoud Farouk, AASTMT, Alex., Egypt
Eng. Hassan Bakr, AASTMT, Alex., Egypt
Prof. Dr. Mohamed Kholief, AASTMT, Alex., Egypt
Dr. Mohamed El-Habrouk, Alex. Univ., Alex., Egypt
Prof. Dr. Ahmed Abou Elfarag, AASTMT, Alex., Egypt
Mr. Kabary Mohamed, AASTMT, Alex., Egypt

ICCTA 2018 Committees (Cont'd)

Finance Chair
Eng. Mahmoud Morsy
Honorary Secretary, Computer Scientific Society

Marketing and Public Relations
Dr. Nezar El Shenawy
Head of Marketing Unit, Postgraduate Studies and
Scientific Research, AASTMT