



25th International Conference on Computer Theory and Applications

ICCTA 2015

24-26 October 2015
Alexandria, Egypt

Conference Program

Day 1

Saturday, October 24th, 2015

DAY 1 - Saturday, October 24th, 2015

09:00 Registration

10:30 Opening Session

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

11:30 Coffee Break

12:00 Keynote Speech¹

**"Climbing the Competitiveness Rank through an Innovation
Eco System"**

Prof. Dr. Ahmed Darwish
Chairman – IEEE Egypt Section

12:30 ITIDA Presentation

Eng. Hussein El-Gueretly
Chief Executive Officer – ITIDA - Egypt

13:00 EMC² Presentation

Marwa Zaghow
Senior Program Manager, University Relations
Turkey, Middle East & Africa
EMC Academic Alliance

DAY 1 - Saturday, October 24th, 2015 (Cont'd)

13:30 Coffee Break

14:00 Keynote Speech

"Connected Electric Vehicles in Smart Cities"

Prof. Dr. Hussein Mouftah

Senior Canada Research Chair and
Distinguished University Professor
School of Electrical Engineering and Computer Science
University of Ottawa, Ontario, Canada

14:30 Keynote Speech

**"Towards Excellence and Assuring Quality in Higher
Education"**

Prof. Dr. Hesham El Deeb

President – Electronic Research Institute - Egypt

15:00 Lunch

End of ICCTA 2015 - Day 1 Activities

¹The meeting for *The Computing and Informatics committee*, Supreme Council of Egyptian Universities is convened in parallel to Keynote speeches and presentations on Day 1.

Day 2

Sunday, October 25th, 2015

DAY 2 - Sunday, October 25th, 2015

9:00 - 11:30 Sessions I and II in parallel

Session I Artificial Intelligence and Machine Learning
Chairs: Prof. Dr. Amin Shoukry and Prof. Dr. Ossama Badawy
Improving Sparse Subspace Clustering Using Subsampled Randomized Hadamard Transform Sabra Hechmi (Institut Supérieur d'Informatique, Tunisie) and Ezzeddine Zagrouba (Institut Supérieur d'Informatique, Tunisie)
Accuracy Improvement of WPBC Dataset-Based Breast Cancer Diagnosis Magdy Abd-elghany Zeid (Arab Academy for Science and Technology, Egypt), M. B. Abdelhalim (Arab Academy for Science, Egypt), and Gouda I. Salama (Arab Academy for Science and Technology, Egypt)
Simple and Robust Design of A Neural-Based Ensemble Classifier Hassan Wahbi Hassan (Arab Academy for Science and Technology, Egypt), Amin Shoukry (Egypt-Japan University of Science and Technology, Egypt), and Mahmoud Farouk (Arab Academy for Science and Technology, Egypt)

Session I Artificial Intelligence and Machine Learning
Epistemic Hybrid Tree Logic Ammar Mohamed (Arab East Colleges, KSA), Rana Mohamed (Cairo University, Egypt), and Hesham Hefny (Cairo University, Egypt)
Opinion Mining Framework For News Reviews To Build Good Customer Loyalty Fainan Nagy El Sisi (Arab Academy for Science and Technology, Egypt), Abd El-Fatah Hegazy (Arab Academy for Science and Technology, Egypt), and Hatem Abdel Kader (Menoufyia University, Egypt)
Framework for Activity Recognition Using Smart Devices Walid Mohamed Aly (Arab Academy for Science and Technology, Egypt), Khaled Eskaf (Arab Academy for Science and Technology, Egypt), and Alyaa Aly (Arab Academy for Science and Technology, Egypt)

Session II Computer Control and Industrial Applications
<i>Chairs:</i> Prof. Dr. Moustafa Hussein and Prof. Dr. Mohamed Taher El-Sonni
Effect of SLA Process Parameters on Part Build-Time Mootaz Ghazy (Arab Academy for Science and Technology, Egypt) and Mohab Hossam (Egypt-Japan University of Science and Technology, Egypt)

Session II
Computer Control and Industrial Applications
<p>Modeling and Simulation of MDF Bagasse Fiber Drying</p> <p>Gafary Mahmoud (Nag-Hamady Fiberboard Company, Egypt), Esam H. Abdelhameed, and G. Shabib (Aswan University, Egypt), and Mahmoud A. Sayed (South Valley University, Egypt)</p>
<p>New Tuning Approach of Discrete PI/PID Controller Applied to Bitumen System Based on Non-Minimal State Space Formulation</p> <p>E. M. Shaban (Helwan University, Egypt), AR. Hamed (Helwan University, Egypt), R. R. Darwish (Helwan University, Egypt), and A. M. Abdel ghany (Helwan University, Egypt)</p>
<p>Mechanism Design with Computational Algebra</p> <p>Samuli Piiipponen (University of Tampere, Finland) and Eero Hyry (University of Tampere, Finland)</p>
<p>Modified Model Predictive Control for a Positioning Mechanism with Harmonic Drive Gear</p> <p>Esam. H. Abdelhameed (Aswan University, Egypt), Tarek Hassan Mohamed (Aswan University, Egypt), and Makoto Iwasaki (Nagoya Institute of Technology, Japan)</p>

DAY 2 - Sunday, October 25th, 2015 (Cont'd)

11:30 Coffee Break

12:00 - 14:30

Session III Information Systems and Software Engineering
Chairs: Dr. Mohamed Kholief and Dr. Mahmoud Farouk
Adapting Balanced Score Card (BSC) technique to assess the Egyptian Government Websites Mai Mahmoud (Arab Academy for Science and Technology, Egypt) and Rasha Abd El Aziz (Arab Academy for Science and Technology, Egypt)
Software Release Planning Models: A Comparative Study Asmaa H. Elsaid (Menofia University, Egypt), Hamdy Ibrahim (Menofia University, Egypt), and Hatem M. Abdul-kader (Menofia University, Egypt)
Evaluating Social Media Information Usage in Ranking the Web A. S. Hashwa, N. El-Fishawy (Menofia University, Egypt) and S. M. Youssef (Arab Academy for Science and Technology, Egypt)

Session III Information Systems and Software Engineering
Efficient Dependable Rules Generation Approach for Data Quality Enhancement Asmaa S. Abdo (Menoufia University, Egypt), Rashed K. Salem (Menoufia University, Egypt), and Hatem M. Abdul-Kader (Menoufia University, Egypt)
A GIS based-Modelling for Best Allocation of Voters Among Polling Centers: Elections in Egypt Case Study Ali Amasha (Arab Academy for Science and Technology, Egypt), Dina El-Sayed Ibrahim (Arab Academy for Science and Technology, Egypt), and Safaa Hassan (National Authority for Remote Sensing and Space Sciences, Egypt)
Decreasing ERP Implementation Failure in Egypt George Sharmokh Wanas (Arab Academy for Science and Technology, Egypt), Ali H. El-Bastawissy (MSA University, Egypt), and Mona Ahmed Kadry (Arab Academy for Science and Technology, Egypt)

14:30 Lunch

20:00 25 Years of ICCTA Celebration (Attendance by Special Invitations)

End of ICCTA 2015 – Day 2 Activities

Day 3

Monday, October 26th, 2015

DAY 3-Monday October 26th, 2015

9:00 - 11:30

Session IV Computer Networks, Security, and HPC
Chairs: Prof. Dr. Shawkat Guirguis and Prof. Dr. Mohamed Essam Khedr
Accelerated Parallel Training of Logistic Regression using OpenCL Hamada M. Zahera (Menoufia University, Egypt) and Ashraf B. El-Sisi (Menoufia University, Egypt)
ROEF: A Smart Search Engine of the 3rd Generation World Wide Web (WWW) Karim Mahmoud (Arab Academy for Science and Technology, Egypt), Hanafy Ismail (Arab Academy for Science and Technology, Egypt), and Mohamed Kholief (Arab Academy for Science and Technology, Egypt)
Mitigating ARP Spoofing Attacks in Software-Defined Networks Ahmed M.AbdelSalam (Menoufia University, Egypt), Ashraf B. El-Sisi (Menoufia University, Egypt) and Vamshi Reddy K (Manipal Institute of Technology, India)

Session IV Computer Networks, Security, and HPC
DNA-Based Data Hiding Using Variable Length Substitution Technique Dina A. Ibrahim (Kafrelsheikh University, Egypt), Elsayed A. Sallam (Tanta University, Egypt), and H.M. Abdalkader (Menoufia University, Egypt)
PRNG Based Modified MSLDIP Watermarking Abdelmgeid A. Ali (Minia University, Egypt) and Ahmed H. Ismail (Minia University, Egypt)
Energy-Aware Enhancement of LEACH Protocol in Wireless Sensor Network Ahmed AL-BAZ (Menoufia University, Egypt) and Ayman EL-SAYED (Menoufia University, Egypt)
Intelligent Collision Detection and Avoidance in Railways using GPS/RF Module S. A. Qunber (Arab Academy for Science and Technology, Egypt), M. S. Zaghoul (Arab Academy for Science and Technology, Egypt), O. Badawy (Arab Academy for Science and Technology, Egypt), and M. Farouk (Arab Academy for Science and Technology, Egypt)

11:30 Coffee Break

DAY 3-Monday October 26th, 2015 (Cont'd)

12:00 - 14:30

Session V Image Processing and Pattern Recognition
Chairs: <i>Prof. Dr. Mohamed Shaheen and Dr. Essam Hamed</i>
Lossless Image Compression Using Agglomerative Hierarchical Clustering and the Jensen-Shannon Divergence Sameh Samir (Arab Academy for Science and Technology, Egypt), Sherif F. Fahmy (Arab Academy for Science and Technology, Egypt), and Gamal Selim (Arab Academy for Science and Technology, Egypt)
An Enhanced Gene Silencing Algorithm Using Hash Table Hoda Elhamy Mohamed (Arab Academy for Science and Technology, Egypt), Essam M. Hamed (Arab Academy for Science and Technology, Egypt), and Mohammad H. Abdel-Rahman (Ain Shams University, Egypt)
Novel Single Image deblurring Technique using Sparse representation and Discrete Radon Transform I.M. EL-Henawy (Zagazig University, Egypt), A. A. Ali (Menia University, Egypt), Kareem Ahmed (BSU University, Egypt), and Hadeer Adel (NUB University, Egypt)

Session V
Image Processing and Pattern Recognition
<p>FPGA Implementation of Iris Recognition Based on Fast DCT Coding</p> <p>Ramadan Gad (Menoufia University, Egypt), M. Zorkany (National Telecommunication Institute, Egypt), Nawal El-Fishawy (Menoufia University, Egypt), and Ayman El-SAYED (Menoufia University, Egypt)</p>
<p>A Novel 3D Image Fusion Approach Using FTransform</p> <p>Saad M. Darwish (Alexandria University, Egypt) and Maha M. Ghoneim (Alexandria University, Egypt)</p>
<p>An Elliptical Basis Function Network for Non-blind Image Deconvolution</p> <p>Mohammad Hashem (Ain Shams University, Egypt), Essam A. Rashed (Suez Canal University, Egypt), and Fatma Harby Mohamed (Suez Canal University, Egypt)</p>
<p>Multiclass Object Recognition Using Object-based and Local Image Features Extractors</p> <p>Menna Maged Kamel (Arab Academy for Science and Technology, Egypt), Mohamed Waleed Fakhri (Arab Academy for Science and Technology, Egypt), H. I. Saleh (Atomic Energy Authority, Egypt), and M. B. Abdelhalim (Arab Academy for Science and Technology, Egypt)</p>

End of ICCTA 2015 Activities

ICCTA 2015 Committees

Conference Chair

H. E. Prof. Dr. Yousry S. El-Gamal

Former Minister of Education

President, Computer Scientific Society

Honorary Chair

Prof. Dr. Ismail Abdel Ghafar Ismail Farag

President, Arab Academy for Science, Technology, and
Maritime Transport (AASTMT), Egypt

Conference Coordinators and Program co-Chairs

Prof. Dr. Ayman Abdel-Hamid, AASTMT, Alexandria,
Egypt.

Dr. Essam Kosba, AASTMT, Alexandria, Egypt.

Organizing Committee

Prof. Dr. Ossama Ismail, AASTMT, Alexandria, Egypt

Prof. Dr. Khaled Mahar, AASTMT, Alexandria, Egypt

Dr. Mahmoud Farouk, AASTMT, Alexandria, Egypt

Eng. Hassan Bakr, AASTMT, Alexandria, Egypt

Dr. Mohamed Kholief, AASTMT, Alexandria, Egypt

Dr. Mohamed El-Habrouk, Alexandria University,
Alexandria, Egypt

Dr. Mohamed El-Shaib, AASTMT, Alexandria, Egypt

Finance Chair

Eng. Mahmoud Morsy

Honorary Secretary, Computer Scientific Society