



29th International Conference on Computer Theory and Applications

ICCTA 2019

29-31 October 2019
Alexandria, Egypt

Conference Program



Day 1

Tuesday, October 29th, 2019

DAY 1 - Tuesday, October 29th, 2019

Venue: AASTMT Presidency Building, AbuQir

09:30 Registration

10:30 Opening Session

“ICT 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

“Smart University Reference Architecture”

Prof. Dr. Hossam Osman

Vice President of Information Technology Industry Development
Agency (ITIDA), Egypt
ICT Minister Advisor for Technology Innovation, Electronics,
and Training, Egypt

12:40 Keynote Speech

“Readiness for the Impact of Emerging Technologies”

Prof. Dr. Ahmed Tantawy

International Strategy and ICT Consultant

DAY 1 - Tuesday, October 29th, 2019 (Cont'd)

Venue: AASTMT Presidency Building, AbuQir

13:20 Company Presentation

“Integrated Technologies & Solutions for Digital Transformation”

Eng. Mahmoud Kassem

eSmartSoft Chairman and CEO

14:00 Keynote Speech

“How to Make IT Business Success by Academia?”

Prof. Dr. Satoshi Goto

Vice President, Egypt-Japan University of Science and Technology (E-JUST), Egypt

14:40 Keynote Speech

“Towards Building the Egyptian Artificial Intelligence Ecosystem”

Prof. Dr. Mohamed Aborizka

Dean, College of Computing and Information Technology,
Heliopolis Campus
Arab Academy for Science, Technology & Maritime
Transport, Egypt

15:15 Lunch

End of ICCTA 2019 - Day 1 Activities

Day 2

Wednesday, October 30th, 2019

DAY 2 - Wednesday, October 30th, 2019

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

9:30 - 12:00

Session I Intelligent Applications, Embedded Systems, and Robotics
Chairs: Prof. Dr. Mohamed Shaheen and Prof. Dr. Mohamed Kholief
Full Papers:
New Real Time (M-Bug) Algorithm for Path Planning and Obstacle Avoidance In 2D Unknown Environment Ahmed Mohamed Mohsen, Maha Ahmed Sharkas, and Mohamed Saad Zaghloul (Arab Academy for Science, Technology and Maritime Transport, Egypt)
Deep Learning Approach for Detecting Digital Elevation Model (DEM) Uncertainty to Enhance Assessment of Water Resources Hanaa A. Sayed, Ahmed M. Sefelnasr, and Essam KH. Abd-Elmaged (Assiut University, Egypt)
Short Papers:
Fuzzy Knowledge Base System For Floating Car Data On SUMO Eman Mahmoud, D. S. Abdul Minaam (Benha university, Egypt), and H. M. Abdul Kader (Menoufia University, Egypt)

Session I Intelligent Applications, Embedded Systems, and Robotics
Signal Processing Framework for Interactive Architecture Eman S. Metwally, Khalid Eskaf, and Walid M. Abdlmoez (Arab Academy for Science, Technology and Maritime Transport, Egypt)
A Decomposed and Feature-based Deep Learning Model for Power Load Forecasting Ahmed Saied El-Berawi and Mohamed Belal (Helwan University, Egypt)

DAY 2 - Wednesday, October 30th, 2019 (Cont'd)

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

12:00 Coffee Break

12:30 Keynote Speech

**“Artificial Intelligence Computing Paradigms in Smart
Healthcare Informatics”**

Prof. Dr. Abdel-Badeeh M. Salem

Professor of Computer Science
Founder and Head of Artificial Intelligence and
Knowledge Engineering Research Labs (AIKERL)

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

13:10 Keynote Speech

**“Private Blockchain Platforms for Business Education in
Enterprise Architecture”**

Prof. Dr. Rossitsa M. Yalamova

Associate Professor, Dhillon School of Business
University of Lethbridge, Alberta, Canada

DAY 2 - Wednesday, October 30th, 2019 (Cont'd)

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

13:50 Keynote Speech

**“Smart Sensors and Computer Devices for Agriculture, Food
Production Process Control and Medicine”**

Prof. Dr. Volodymyr Romanov

Head of Data Acquisition Systems, Department Glushkov,
Institute of Cybernetics of Ukrainian National Academy of
Sciences, Ukraine

14:30 Keynote Speech

**“The Role of Modelling in Business Software Development:
Case Study of Teaching and Industrial Practice in Zrenjanin,
Serbia”**

Dr. Ljubica Kazi

Vice Dean for Education, University of Novi Sad
Technical faculty “Mihajlo Pupin”
Zrenjanin, Serbia

15:15 Lunch

End of ICCTA 2019 – Day 2 Activities

Day 3

Thursday, October 31st, 2019

DAY 3-Thursday October 31st, 2019

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

9:30 - 12:00

Session II Cloud, High Performance Computing, and E-learning
Chairs: Prof. Dr. Ayman Abdel-Hamid and Prof. Dr. Ahmed Abou Elfarag
Full Papers:
Enhanced Fuzzy AHP-TOPSIS for Cloud Service Selection Safia N. Mohallel, Ayman A. Abdel-Hamid, and Khaled A. Eskaf (Arab Academy for Science, Technology and Maritime Transport, Egypt)
Hybrid Fault Tolerance Approach Based on Replication Impact Heuristic for Cloud Computing Eman AbdElfattah, Mohamed Elkawkagy, and Ashraf El-Sisi (Menoufia University, Egypt)
Improving Opinion Mining in Social Networks Data Shaimaa Mahmoud , Mahmoud Hussein, and Arabi Keshk (Menoufia University, Egypt)
Detecting Students Learning Styles and Knowledge Level in E-Learning Environment Norhan Kamal and Mohamed Abo-Rizka (Arab Academy for Science, Technology and Maritime Transport, Egypt)

Short Papers:

Data Layout Organization effect on Communication in Parallel Programs

Ahmed M. El-Sayed, Ahmed Abou El-Farag, and Yasser Y. Hanafy (Arab Academy for Science, Technology and Maritime Transport, Egypt)

12:00 Coffee Break

DAY 3-Thursday October 31st, 2019 (Cont'd)

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

12:30 - 15:00

Session III Image Processing and Artificial Intelligence
Chairs: Prof. Dr. Ossama Badawy and Prof. Dr. Khaled Mahar
Full Papers:
Automatic Classification of Gastrointestinal Diseases Based on Machine Learning Techniques Bahaa Rabi, Omneya Attallah, Mohamed S. Zaghlool, and Maha A. Sharkas (Arab Academy For Science, Technology and Maritime Transport, Egypt)
X-Ray Image Enhancement using Global Histogram Equalization Muhammad Hameed Siddiqi (Jouf University, Kingdom of Saudi Arabia)
A Novel Approach for Reducing RFID Uncertainty Using Variational Bayesian Inference Ahmed Yousif and Hatem M. Abdlkader (Menoufia University, Egypt)
Short Papers:
A Deep Learning Approach for Text Generation Ahmed Elmogy (Prince Sattam Bin Abdelaziz University, Kingdom of Saudi Arabia), Belal Mahmoud, and Mohamed Salah (Cairo University, Egypt)

<p style="text-align: center;">Session III Image Processing and Artificial Intelligence</p>
<p>An Adaptive Approach to Enhance The Quality of Hazy Images</p>
<p>Madallah Alruwaili (Jouf University, Kingdom of Saudi Arabia)</p>

15:00 Coffee Break

End of ICCTA 2019 Activities

ICCTA 2019 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 2019 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