

ICENCO 2014

10th International Computer Engineering Conference:

Venue: December 29th at Four Seasons-First Residence, Giza
December 30th at:

**Computer Engineering Department
Faculty of Engineering**

**Cairo University
Giza, EGYPT**

*"Today Information Society What's
next?"*

December 29-30, 2014



Conference Highlight

**Monday, December 29th,
At Four Seasons Hotel-First Residence, Giza**

8:00 – 8:45 am	Registration
8:50 – 9:00 am	Soft Opening Prof. Samir Shaheen, ICENCO Chair and x-Dean Faculty of Engineering, Cairo University
9:00 – 11:00 am	Session 1 Image Processing & Computer Vision, Data & Software Engineering
11:00 - 11:15 am	Coffee Break
11:15 am – 1:00 pm	Session 2 Data & Software Engineering, Machine Intelligence
1:00 – 2:00 pm	Lunch Break
2:00 – 3:45 pm	Session 3 Computer Hardware and Embedded Systems, Communications and Computer Networks
3:45 – 4:00 pm	Coffee Break
4:00 – 5:45 pm	Session 4 Communications and Computer Networks
6:30 – 8:30 pm	Official Opening, Banquet, Honoring of class of 2004, and “Keys to Peace of Mind” by Ms. Hala Dakrouri



Conference Highlight

**Tuesday, December 30th,
At Faculty of Engineering, Cairo University, Giza**

10:00 – 11:30 am	Invited paper by Dr. Mohamed Zahran "Future Directions of Multicore Processors"
11:30 am – 12:30 pm	Coffee break with Computer Engineering Faculty Members
12:30 – 1:30 pm	Special Msc. And PhD session
1:30– 2:00 pm	Closing



Program

Date	Monday 29, December 2014
Location	Four Seasons Hotel -First Residence, Giza

Session 1: Image Processing & Computer Vision, Data & Software Engineering

(Moderators: Prof. Aly Fahmy Faculty of Computers and Information (x-Dean), Prof. Magda Fayek X-chair Computer Engineering Dept. Cairo University.)

Time	Ref. No.	Paper Title
9:00 – 9:15	Pa-47	Classification of Blood Vessels as Arteries and Veins for Diagnosis of Hypertensive Retinopathy, Uzma Abbasi, Muhammed Akram
9:15 – 9:30	EG-51	Non-Local versus Bilateral:Multi-adapting disparity map estimation framework, Doaa Altantawy, Sherif Kishk
9:30– 9:45	EG-120	An Optimized PCNN For Image Classification, Mona Mahrous, Mohamed Abdelhalim, and Amr Badr
9:45 – 10:00	EG-121	Extraction of Prediction Rules: Protein Secondary Structure Prediction, Mohamed Abdelhalim, Mai Mabrouk, and Ahmed Muhamud
10:00 – 10:15	EG-1	DPM: Fast and scalable Clustering Algorithm for Large Scale High Dimensional Datasets, Tamer Ghanem, Wail Elkilani, Hatem Ahmed, and Mohiy Hadhoud
10:15 – 10:30	EG-78	Fuzzy Time Series Approach for Optimizing Crops Planting Dates with Climate Changes, Assem Mohammed, Ahmed Gad Allah, and Hesham Hefny
10:30 – 10:45	EG-80	Verifiable E-Voting System with Receipt-Freeness, Marwa Badr, Amany Sarhan, and Hatem Abdulkader
10:45– 11:00	EG-84	A Two-dimension Fuzzy Set based Approach for Matching Touch-based Gestures, Sabour A., Gadallah M., and Hefny A



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Session 2: Data & Software Engineering, Machine Intelligence

(Moderators: Prof. Reem Bahgat x-Dean Faculty of Computers and Information, Prof. Nevin Darwish Computer Engineering Department, Cairo University-(x-Chair))

Time	Ref. No.	Paper Title
11:15 – 11:30	UN-6	Speech Therapy Software on an Open Web Platform, Selim S. Awad, and Christopher Piechocki
11:30 – 11:45	EG-2	Optimized Static Pricing Approach for Revenue Maximization in Telecommunications, Dina El-Reedy, Amir Atiya, Hatem Fayed, and Mohamed Saleh
11:45 – 12:00	EG-4	A Simulation-Based Overbooking Approach For Hotel Revenue Management, Ahmed Fouad, Amir Sorial, Mohamed Saleh, and Abd El-Moniem Bayoumi
12:00 – 12:15	EG-19	M-Estimators Based Activation Functions for Robust Neural Network Learning, Mohamed Essai, and Ali R. Abdellah
12:15 – 12:30	EG-88	What Quantile Regression Neural Networks Tell us About Prediction of Drug Activities, Mohammed E. El-Telbany
12:30 – 12:45	EG-90	Particle Swarm Optimization algorithm for the continuous p-median location problems, Hassan Rabie, Ihab El-Khodary, and Assem Tharwat
12:45 – 1:00	EG-117	Adaptation of cuckoo search algorithm for the Motif Finding problem , Mohamed Abdelhalim, Mai Mabrouk, and Ebtehal Elewa



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Session 3: Computer Hardware and Embedded Systems, Communications and Computer Networks

***(Moderators: Prof. Hassanein Amer Electronics Engineering AUC,
Prof. Ihab Talkhan Chair Computer Engineering Dept., Cairo
University)***

Time	Ref. No.	Paper Title
2:00 – 2:15	UN-71	Fuzzy Diagnostic Gear Determination, Adnan Shaout, Dennis Breton, and Selim S. Awad
2:15 – 2:30	UN-73	Low Cost Embedded Weather Station with Intelligent System, Adnan Shaout, Yulong Li, Mohan Zhou, and Selim Awad
2:30 – 2:45	EG-115	An Intelligent Fuzzy Controller for Maximum Power Point Tracking, Mohammed E. El-Telbany, Ayman Mahgoub, and Abdelhalim Zekry
2:45 – 3:00	EG-5	A Tunable Capacitor Sensor for a Real-Time Buried Cable Protection, Mazhar Tayel, and Abd El-Hady Kassem
3:00 – 3:15	EG-7	Distributed Channel Selection Based On Channel Weight For Cognitive Radio Network, Mohammed Hashem, Sherif I. Barakt, and Mahmoud A. AttaAlla
3:15 – 3:30	EG-9	Real Time Traffic Accident Detection System using Wireless Sensor Network , Hosam M. Sherif, M. Shedid, and Samah Senbel
3:30 – 3:45	IN-17	On Dynamic Chaotic S-BOX Based Advanced Encryption Standard Algorithm for Image Encryption, Ajish Sreedharan



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Session 4: Communications and Computer Networks

*(Moderators: Prof. Abdel Rahman Elsawy, and Prof. Ihab Ali
Electrical Engineering, Helwan University)*

Time	Ref. No.	Paper Title
4:00 – 4:15	EG-29	MIMO-Aided Robust LTE Detectors in Actual Noise Environments, Mohamed H. Essai
4:15 – 4:30	EG-49	Hierarchical Multipath Adaptive Periodic Threshold-sensitive Energy Efficient Network Protocol for Wireless Sensing, Osama A. Abouelkhair, and Amr Elsaadany
4:30 – 4:45	EG-60	A Fuzzy-based Routing Protocol For Metropolitan-Area Mobile Adhoc Networks, Walaa Gad, and Tamer Abdelkader
4:45 – 5:00	EG-72	An Efficient Dynamic Thresholds Energy detection Technique for Cognitive Radio Spectrum Sensing, Hossam M. Farag, and Ehab M.
5:00 – 5:15	EG-99	An Efficient FPGA Implementation of OFDM Physical Layer for SDR-Based Applications, Mohamed S. Mohamed, Abel-Halim Zekry, and Mohammed Kamel
5:15 – 5:30	EG-103	The Narrator: A Smart Data Offloading System for Interactive Navigation in Museums, Ahmed S. Ali
5:30 – 5:45	EG-105	Image Compression Algorithms in Wireless Multimedia Sensor Networks: A survey, Hanaa Y. Zain El-Din, Mostafa A. Elhosseini, and Hesham A. Ali



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6:30 – 8:30	Official Opening, Honoring of class of 2004 "Keys to Peace of Mind" speech by Ms. Hala Dakrouri* and Banquet
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*Ms. Dakrouri is a graduate of Cairo University,
M.Sc. in Statistics, experienced Translator, Office Administrator,
Spiritual seeker and former Art of Living Instructor with 7 years of
volunteer work.



Program

Date	Tuesday 30, December 2014
Location	Faculty of Engineering, Cairo University, Giza

10:00 – 11:30 am	Invited paper by Dr. Mohamed Zahran "Future Directions of Multicore Processors"
11:30 am – 12:30 pm	Coffee break with Computer Engineering Faculty Members
12:30 – 1:30 pm	Special MSc. And PhD session
1:30– 2:00 pm	Closing

Mohamed Zahran received his Ph.D. in Electrical and Computer Engineering from University of Maryland at College Park in 2003. He is currently a faculty member with the Computer Science Department at NYU. His research interest spans several aspects of computer architecture, such as architecture of heterogeneous systems, hardware/software interaction, and biologically-inspired architectures. Zahran is a senior member of IEEE, senior member of ACM, and Sigma Xi scientific honor society. He has more than 30 papers in refereed conferences and journals, and served as program committee member on many conferences.



Invite Paper Title : Future Directions of Multicore Processors

By Dr. Mohamed Zahran

Computer Science Dept. NYU

Abstract:

Words like multicore, many-core, Moore's law ending, ..., have been around for more than a decade. These buzz words are stating part of the reality, but not all of it. In this talk, we will present the status quo of the current multicore/many-core processors, and the expected future directions in light of several advances both in process technology and in system software.