



IEEE-ICELIE'2006

Conference Guide

MESSAGE FROM THE GENERAL CO-CHAIRS

It is with great pleasure that we welcome you in Hammamet (Tunisia) for the first IEEE International Conference on E-Learning in Industrial Electronics (ICELIE'2006). For this first edition, ICELIE has been fully sponsored by the IEEE France Section and technically co-sponsored by the IEEE Industrial Electronics Society (IES) and more specifically by its technical committee on Education. The birth of ICELIE was decided two years ago after a successful International Conference on Industrial Technology (ICIT'2004) organized in the same venue in December 2004. The ICELIE'2006 local organizing committee is composed of members of the IEEE France Section and also of staff from the University of Picardie "Jules Verne" and the "Ecole Supérieure des Sciences & Techniques de Tunis" – University of Tunis.

Hammamet is located south of the Cap Bon peninsula, 10km south-west of Nabeul, 64km south of Tunis by motorway, 100km north of Sousse by motorway. Hammamet is also known in Tunisia and all the Mediterranean area as the equivalent of St Tropez in France with many hotels near the sea and with very sunny and attractive weather for almost all the year. In December, the surroundings are very enjoyable and we do hope that all ICELIE attendees will appreciate their stay in Hammamet. The conference venue is Hotel Le Royal Yasmine-Hammamet with its Moorish architecture, manicured gardens and sandy beaches. It has been established as a land mark hotel within this magnificent tourist area in Tunisia.

For its first edition, the ICELIE program committee has received around 140 submissions from which 80 have been selected for final presentation. However, only 38 final submissions have been uploaded in the conference website with copyright forms and regular registration of at least one attendee per accepted paper. These 38 papers, published in the CD-ROM Proceedings with ISBN, come from 13 countries. This amount shows without any doubt the interest for e-learning in industrial electronics even if there are not many programs available on-line. However, many initiatives are now supported within international programs such as the ones initiated by the European Commission.

Even if the number of papers is rather small, we wish you a very successful conference by having great technical sessions, by meeting new friends and colleagues and by returning back home with new ideas on e-learning. Attracting talented students in the industrial electronics area is probably related to optimized usage of e-learning all around the world.

Enjoy Hammamet, enjoy Tunisia and enjoy ICELIE'2006 as well!

Gerard-Andre Capolino
Farhat Fnaiech
ICELIE'2006 general co-chairs

CONFERENCE ORGANIZATION



GENERAL CO-CHAIRS

Gerard-Andre Capolino (France)
Farhat Fnaiech (Tunisia)

TECHNICAL PROGRAM CO-CHAIRS

Luis Gomes (Portugal)
Véronique Perdereau (France)

INFORMATION TECHNOLOGY SUPPORT

Cyril Drocourt (France)
Aleksander Malinowski (USA)

STEERING COMMITTEE

Kamal Al Haddad (Canada)
Guiseppe Buja (Italy)
Richard Grisel (France)
Fumio Harashima (Japan)
Karel Jezernik (Slovenia)
Okyay Kaynak (Turkey)
Marian Kazmierkowski (Poland)
Ramu Krishnan (USA)
Joel Snyder (USA)
Bogdan Wilamowski (USA)
Baldomir Zajc (Slovenia)

PUBLICITY

Rokuya Ishii (Japan)
Mohamed Jemni (Tunisia)
Ramu Krishnan (USA)
Daniel Pasquet (France)
Ninoslav Stojadinovic (Serbia & Montenegro)
Maria Ines Valla (Argentina)

TECHNICAL PROGRAM COMMITTEE

Franck Betin (France)
Seta Bogosyan (USA)
Bimal K. Bose (USA)
Eric Brassart (France)
Carlo Cecati (Italy)
Fernando Coito (Portugal)
Victor Fouad-Hanna (France)
Leopoldo Garcia-Franquelo (Spain)
Ahmad Ibrahim (Canada)
Leandro Indrusiak (Germany)
Kim Man (China)
Jozef Modelski (Poland)
Kouhei Ohnishi (Japan)
Juan-J Rodriguez-Andina (Spain)
Mohamad Saleh (Ireland)
Alf Weaver (USA)

REGISTRATION

Humberto Henao (France)
Mounir Sayadi (Tunisia)

FINANCE

Humberto Henao (France)
Christine Nora (France)

TABLE OF CONTENTS

General Information	9
Program at a Glance	13
Program of the Sessions	
Monday 18	15
Tuesday 19	16
Wednesday 20	18

Location and advices

ICELIE'2006 will be organized in Hotel Le Royal at Yasmine-Hammamet (Tunisia).

This city is located at almost 70km south of Tunis downtown by motorway. The best way to travel between the Hotel Le Royal and Tunis Carthage International Airport is by using yellow cab to go first to Tunis downtown and then take the bus or the train to go to Hammamet city. Then, in Hammamet downtown, it is necessary to take again an other yellow cab to go to Hotel Le Royal Hammamet-South. All the travel will cost around 20TND. You are strongly advised not to take yellow cabs to travel directly from the Tunis Carthage International Airport to the conference hotel in Hammamet since they are too expensive and they are not allowed to perform long distance travels. Inside any city, cabs are very convenient and cheap. Please do always verify that the meter is on! For long distances, you may use trains or buses available from any city downtown.

Registration desk

The registration desk in the lobby of Hotel Le Royal will be open on:

Monday December 18, 2006

10:00am-12:00am

2:00pm-5:00pm

Tuesday December 19, 2006

9:00am-12:00am

2:00pm-5:00pm

Wednesday December 20, 2006

9:00am-11:00am

Official language

The official language of the conference is English for presentations, discussions and conference activities. For the individuals having English as mother language, please do make the effort to be clear enough to be understood by the others.

Visa

Please do verify with your travel agency if you need a visa to enter Tunisia. For most of European countries inside the Schengen space no visa is needed and the ID card is enough to enter. However, it is strongly recommended to bring your passport with you. The conference organizers decline all the responsibility if your visa will be denied for any reason. Please do take care of all the visa formality by your own.

Weather

The month of December is just in the beginning of winter time in Tunisia. However, the weather is never cold and attendees could expect a temperature in between 6°C and 15°C. By security, you could bring your umbrella since it may rain a bit during your stay. Of course, the Mediterranean Sea is too cold to take a bath but Hotel Le Royal is equipped with an inside heated swimming pool!

Daily conference breaks

From Monday December 18 to Tuesday December 19, the coffee breaks will be organized once a day from 4:00pm to 5:00pm. No coffee breaks will be organized in the morning since only one session is scheduled from 9:00am to 11:00am.

Welcome reception

A welcome reception will be organized on Monday December 18, 2006 in the lobby of Hotel Le Royal – Yasmine Hammamet from 8:00pm to 9:00pm. Please don't miss this informal event you will surely meet new friends and colleagues!

Gala dinner

The gala dinner will be organized on Tuesday December 19, 2006 at Restaurant "Capri" – Hotel Le Royal 8:30pm-11:30pm. Dressing could be casual.

Lunches

No lunches will be provided with ICELIE'2006 registration. However, for attendees being lodged in Hotel Le Royal, the lunches will be included with the hotel package.

Paper presentation

Oral

All the authors are kindly requested to meet their co-chairs in the session room 30 minutes before the session schedule in order to download their presentation in one of the co-chair computer. They have to provide the co-chairs with a PowerPoint or PDF presentation bring on a USB key or a CD-ROM (both are strongly recommended). It is not possible to change of computer in between presentations. The length of the presentation is restricted to 20 minutes including questions. The authors are strongly advised to keep their oral presentation within 15 minutes (15 to 20 slides) and to let 5 minutes for questions. They have to bring a short printed bio of 10 lines maximum to the session co-chairs.

Session chairs

All the session chairs (special sessions and regular) have to bring their own laptop with them. The packages Microsoft Office PowerPoint® 2003 or higher and the Acrobat Reader® 7.0 or higher with European embedded fonts have to be downloaded before coming. They will have the responsibility of downloading the author presentations at least 30 minutes before the beginning of the session. The authors have to provide them with a USB Key or a CD-ROM with their presentation inside and a short bio (max. 10 lines) in order to be introduced.

The session chairs have the responsibility to make the schedule strictly respected. Each presentation plus questions have to be presented within a period of 20 minutes. In case of "no show", the session chair has to wait 20 minutes for the next paper or to close the session if it is the last paper. Each session chair has to fill a form (one by session) for session evaluation and to bring it back to the registration desk.

All the rooms will be equipped with a video projector and a screen. The session chairs will be assisted by one conference organization member in each room from the beginning of the session up to the end.

Internet access

A free Internet access will be provided to all the ICELIE'2006 participants. There is a room downstairs near the shops in front of the lobby.

PROGRAM AT A GLANCE

	9:00am-11:00am	2:00pm-4:00pm	4:00pm-5:00pm	5:00pm-7:00pm
Monday December 18		Session 1 (Carthage)	Coffee break	Session 2 (Carthage)
Tuesday December 19	Session 3 (Carthage)	Session 4 (Carthage)	Coffee break	Session 5 (Carthage)
Wednesday December 20	Session 6 (Carthage) Poster Session (Lobby)			

OPENING CEREMONY:

Monday December 18, 2006 – Room Carthage - 11:30am-12:00am

WELCOME RECEPTION:

Monday December 18, 2006 in front of the Hotel Lobby at 8:00pm

GALA DINNER:

Tuesday December 19, 2006 at the Restaurant “Capri” at 8:30pm

MONDAY DECEMBER 18TH, 2006**Session 2 Experiences on E-learning II**

Co-Chairs

Room / Time

Carthage

Monday December 18th

5:00 PM to 7:00 PM

- 5:00 pm TF-002097: Virtual and remote laboratories**
Mamane Moustapha Dodo Amadou, Jean Pierre Kenné, Maarouf Saad, Vahé Nerguizian
- 5:20 pm TF-001724: an example of the MAPEE courses: Non linear Control of Electromechanical Systems**
Franck Betin
- 5:40 pm TF-000345: LoGen - Generation and Simulation of Digital Logic on the Gate-Level via Internet**
Ruediger Rennert, Hartmut Pfueller, Dirk Timmermann
- 6:00 pm TD-002127: E-learning Project Based Approach for analog electronic circuits**
Vahé Nerguizian, Mustapha Rafaf
- 6:20 pm TD-001406: E-Learning whilst eliciting and working IEC 61850 Substation, a case study**
Ivan Maffezzini, Alice Premiana
- 6:40 pm TD-002445: E- Learning in Electronics and Information Engineering: The M1 e-EEA project in France**
Richard Grisel

TUESDAY DECEMBER 19TH, 2006**Session 3 Experiences on E-learning & Applications**

Co-Chairs

Room / Time

Carthage

Tuesday December 19th

9:00 AM to 11:00 AM

- 9:00 am TF-000884 :European Project Interreg III « Réseau Ressources Formations Industrie (2RFI) »**
Pascal Carton, Thierry Capitaine, Jacky Senlis
- 9:20 am TF-001244: An Interactive tool for the study of the Fieldbus impact on a Steam Turbine-based Current Generator**
Orazio Mirabella, Antonino Raucea
- 9:40 am TF-001996: Emphasizing Graphical Modeling Formalisms within Digital Systems Design Course**
Luis Gomes, Aniko Costa
- 10:00 am TF-001279: Using New Technologies for Teaching Power Electronics and Assessing Students**
Drosos Nafpaktitis, Dimos Triantis, Panagiotis Tsiakas, Charalampos Stergiopoulos
- 10:20 am TD-000949: Representing Knowledge for E-Courses via Generic Models – An Application to the Analysis of DC Electrical Circuits**
Amir Abdessemed, Mehdi Najjar, André Mayers, Habib Hamam
- 10:40 am TF-000221: The Smart Home Concept: our immediate future**
Vincent Ricquebourg, David Menga, David Durand, Bruno Marhic, Laurent Delahoche, Christophe Loge

Session 4 Computational Intelligence Systems

Co-Chairs

Room / Time

Carthage

Tuesday December 19th

2:00 PM to 4:00 PM

- 2:00 pm TF-000361: Color image segmentation using type-2 fuzzy sets**
Jerome Clairet, Andre Bigand
- 2:20 pm TF-000051: Combined membership functions in fuzzy signal detection**
Chehla Alioua, Fouzi Soltani
- 2:40 pm TF-000175: A k-Means Clustering Algorithm Initialization for Unsupervised Statistical Satellite Image Segmentation**
Ahmed Rekik, Mourad Zribi, Ahmed Ben Hamida
- 3:00 pm TF-000213: Genetic Algorithm for the Single Machine Total Weighted Tardiness Problem**
António Ferrolho, Manuel Crisóstomo
- 3:20 pm TF-000256: Defect Identification Using Artificial Neural Networks And Finite Element Method**
Tarik Hacib, M. Rachid Mekideche, Nassira Ferkha
- 3:40 pm TF-000388: Integration of Artificial Neural Networks and Genetic Algorithm to Predict Electrical Energy consumption**
Ali Azadeh

Session 5 Robotics Systems & Mecatronics

Co-Chairs

Room / Time

Carthage

Tuesday December 19th

5:00 PM to 7:00 PM

- 5:00 pm TF-001821: Processing with omnidirectional vision sensors (some examples)**
Cyril Drocourt, Eric Brassart, Bruno Marhic, Laurent Delahoche
- 5:20 pm TF-001988: A Hybrid Methodology for Robotic Architectures with a Cellular Approach**
Carlos Adolfo Piña García, V. Angélica García Vega
- 5:40 pm TF-000086: Derivative control in sliding mode of a robot driven by artificial muscles**
Mourad Chettouh, Redouane Toumi, Mustapha Hamerlain
- 6:00 pm TF-001112: Maneuver Algorithm and Kinematical Energy Analysis of a Robot Based on Instantaneous Center of Rotation**
He Xu, Marie Bernard Sidibe, Ran Wei
- 6:20 pm TF-000841: Multisensor Fusion Algorithms for Maneuvering Target Tracking**
Li-Wei Fong, Chan-Yu Fan
- 6:40 pm TD-000507: AGV Path Planning in Unknown Environment Using Fuzzy Inference Systems**
Majdi Morteza

Session 6 Control & Measurement

Co-Chairs

Room / Time

Carthage

Wednesday December 20th

9:00 AM to 11:00 AM

- 9:00 am TF-002062: Acoustic Intensity Measurement in a Doubly Salient Switched Reluctance Motor**
Kaddour Abdelhafid
- 9:20 am TF-002453: Input-output Linearization Control of Current-fed Induction Motors with Rotor Resistance and Load Torque Identification**
Stanislav Enev
- 9:40 am TF-000868: Low Frequencies Optimal Control of an Inverted Pendulum**
Salahadin Mirsaeid Ghazi, Ali Akbar Jalali
- 10:00 am TF-000647: Design and Implementation of a Microprocessor-Based Interrupt-Driven Control for an Irrigation System**
Azzouz Benzekri, Larbi Refoufi, Djamel Benazzouz
- 10:20 am TF-001953: Variable Step Size Least Mean Square Estimator for Single-Sweep Event Related Potentials**
Moncef Benkherraf, Radouane Bouguerra, Tarik Choufa
- 10:40 am TD-002364: On The Identification of Nonlinear Digital Transmission Channels**
Imen Cherif, Sabeur Abid, Farhat Fnaiech

Poster Session

Room / Time

Hotel Lobby

Wednesday December 20th

9:00 AM to 11:00 AM

- TD-001147: Model Predictive Control of a Highly Nonlinear Process Based on Piecewise Linear Wiener Models**
Ghobad Shafiee, Mohammad Mehdi Arefi, Mohammad Reza Jahed-Motlagh, Ali Akbar Jalali
- TD-002437: Recent Trends in Intelligent Job Shop Scheduling**
Amel Yahyaoui, Farhat Fnaiech