FINAL PROGRAM

18-20 April 2012

JW Marriott Hotel, Bucharest, Romania

Organized by

Sponsored by

British Institute of Technology & E-commerce

LMS Engineering Innovation
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General Information

1. Conference Location

The ECEC-EUROMEDIA-FUBUTEC’2012 Conference is being held at the

Hotel JW Marriott
Calea 13 Septembrie 90
Bucharest,
050726 Romania
Tel: (+40)21-4030000
Fax: (+40)21/4030001

The registration desk will be placed in the hallway on the first floor in the corridor near the meeting room from Wednesday morning April the 18th onwards, where registration will start at 08.00 a.m. and will end at 5.00 p.m. On Thursday April 19th registration will be from 8.30 a.m. - 5.00 p.m. with Friday registration only from 8.30 a.m.- 9.00 a.m. The way to the conference and desk will be signposted.

ALL MAJOR MAPS ARE AT THE BACK OF THIS PROGRAMME

How to reach the conference location:

From the Otopeni airport you can either take Express bus 783, and change at Piata Unirii with bus 385, which further stops right in front of the Marriott hotel (route with 385: Piata Unirii - Piata Natiunile Unite Elie Radu - Pod Izvor - Palatul Parlamentului - Dr. Staicovici – Piata Arsenalului)
Alternatively, from Otopeni Airpot, take Express bus 780 goes from Otopeni Airport to Gara de Nord, from where one has to take bus 178 (Gara De Nord Witing - Mircea Vulcanescu - Berzei - Cismigiu - Sala Palatului) - and walk for 5 min from bus stop Sala Palatului to Marriott. The nearest bus stop to the hotel is: Piata Arsenalului via bus 385.

or you can take a taxi Currently the only taxi company licensed to pick-up passengers from the airport is Fly Taxi (telephone: 9411). Fly Taxi's fee per km for trips from the airport is about 3.30 Lei ($1.8/mile). Note: Fly Taxi is not the best alternative for in-city taxi booking. Therefore it is advisable to only use Fly Taxi when coming from the Henri-Coanda airport to Bucharest, and use another taxi company to get back to the airport. The average fare from the International Airport 'Henri Coanda' is approximately 45 euros.

Use this link for latest travel info to the hotel:
General Information

2. Badges
Each registrant will receive a name badge upon registration. The badge must be worn, in order to be admitted to the technical sessions, lunches and social event.

3. Tickets
Extra tickets for the social event and lunches are available from the registration desk. Price: (or equivalent in another currency) for extra tickets

<table>
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<tr>
<th>Ticket Type</th>
<th>Price</th>
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<tbody>
<tr>
<td>Extra conference dinner</td>
<td>€ 30</td>
</tr>
<tr>
<td>Extra lunch ticket</td>
<td>€ 25/lunch</td>
</tr>
</tbody>
</table>

4. Registration
The ECEC-EUROMEDIA-FUBUTEC’2012 Registration Desk will be open for information and registration on the first floor of the hotel.

- **Wednesday, April 18**............. 8.00 a.m.  to  5.00 p. m.
- **Thursday, April 19**................ 8.30 a.m.  to  5.00 p. m.
- **Friday, April 20**..................... 8.30 a.m.  to  9.00 a. m.

The location of the registration desk will be signposted.

5. Conference Proceedings
Each fully paid registrant will be provided with a copy of the ECEC/EUROMEDIA Conference Proceedings (printed format). This is NOT applicable to students who are not authors and who have not fully registered. (Extra copies are available on a cash and carry basis at special rates during ECEC-EUROMEDIA-FUBUTEC’2012)
Price: (or equivalent in another currency) for an extra copy

<table>
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<th>Proceedings</th>
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<tr>
<td>FUBUTEC-ECEC’2012 Proceedings</td>
<td>€ 30</td>
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<td>EUROMEDIA’2012 Proceedings</td>
<td>€ 40</td>
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6. Meeting Room
The meeting room for the conference is on the first floor and is designated as SALON A. The way to the room will be signposted.

7. Need Help?
Please see the conference desk for your questions.
General Information

8. Social Event and Lunches
All full registrants are invited to all Lunches and Coffee Breaks which are served at the JW Marriott Hotel. Participants need to show their badge at the entrance of the cafeteria. On the 18th from 5.30 p.m. onwards a visit is envisaged to the research facilities of the University POLITEHNICA of Bucharest. More info on the visit at the conference itself.

The Conference Dinner
All participants are invited to the conference dinner on THURSDAY the 19th of April at the Hanu’ Berarilor (Casa Oprea Soare) restaurant. As we need to give an exact number of participants we would appreciate your confirmation at the desk before Wednesday evening. The restaurant is within walking distance from the hotel. Departure from the hotel at 7.30 p.m..

9. Room Legend
The meeting room will be designated as the MEETING ROOM. Signposts will indicate the way to the room.

10. Best Paper Award
During the conference the papers, which were accepted as extended papers will be judged by the committee in order to choose the best paper of the ECEC-FUBUTEC-EUROMEDIA’2012 conference

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**Session Chairs** are chosen on a voluntary basis by proposals by either authors or local committee members or are appointed by the Track Chairs, General Program Chair or General Conference Chair. They are responsible for their assigned session. They make sure their speakers are available, take care of the timing within the session, chair the discussion after each presentation and introduce each speaker based on the CV’s given to them by the authors. If a session chair is not available then the first author takes on the responsibility to chair.

THE NUMBERS NEXT TO THE PRESENTATIONS DENOTE THE PAGE NUMBERS IN THE PROCEEDINGS. IF NO NUMBERS ARE MENTIONED THEN THIS PAPER IS NOT PUBLISHED IN THE PROCEEDINGS

THE AUTHORS WHO ARE UNDERLINED ARE NORMALLY THE PRESENTERS

PAPERS IN GREY BOXES ARE THE EXTENDED PAPERS ELIGIBLE FOR THE BEST PAPER AWARD
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<td>Hardware-in-the-Loop Simulation – A Concurrent Engineering Tool</td>
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|           | Valentin Cristea                               |
| 10.00-10.30 | COFFEE BREAK                                   |
| 10.30-12.30 | SESSION VI                                     |
|           | CLOUD COMPUTING                                |
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| 13.30-14.30 | SESSION VII - TUTORIAL                         |
|           | Detection of Human Activities and Human Intentions through Cognitive Architecture  
<p>|           | Ignazio Infantino                              |
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| 15.00-17.30 | SESSION VIII                                   |
|           | COLLABORATIVE ENGINEERING AND KNOWLEDGE ENGINEERING |
| 20.00 – 23.00 | CONFERENCE DINNER                             |</p>
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Wednesday, 18th April 2012

HALLWAY FIRST FLOOR
Registration
08.00 - 17.00

MEETING ROOM FIRST FLOOR
08.45 – 10.00
Opening ECEC-EUROMEDIA-FUBUTEC’2012
Welcome
Introductory Speech and Keynote Speech

Welcome Address

Dr. Ciprian Dobre, POLITEHNICA University of Bucharest
Dr. Mihnea Costoiu, Rector of UPB
Professor Nicolae Tepus, POLITEHNICA University of Bucharest
Professor Adina Magda Florea, POLITEHNICA University of Bucharest
Professor Dan Stefanoiu, POLITEHNICA University of Bucharest

09.00 – 09.15
INTRODUCTORY SPEECH
Chair: Ciprian Dobre, POLITEHNICA Univ. of Bucharest, Romania

Hardware-in-the-Loop Simulation – A Concurrent Engineering Tool
Nicolae Vasiliu and Petru Cristi Irimia, POLITEHNICA University of Bucharest, Romania

09.15 – 10.00
KEYNOTE SPEECH
Chair: Nicolae Vasiliu, POLITEHNICA Univ. of Bucharest, Romania

Innovation Engineering by Simulation
Herman Van der Auweraer, LMS International, Heverlee, Belgium
Wednesday, 18th April 2012

10.00 - 10.30
COFFEE BREAK

10.30 – 12.30

MEETING ROOM - 10.30-12.30
PRODUCTION OPTIMIZATION
Chair: Florin Pop, POLITEHNICA Univ. of Bucharest, Romania

ECEC_10_03
A Direct Method for assessing the Influence of Material Couples on the Swashplate Angle of Axial Piston Pumps
Adrian Ciocanea ................................................................. 21

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Concurrent Engineering by Hardware-in-the-Loop Simulation with R-T Workshop
Radu Puhalschi, Daniela Vasiliu, Daniel Dragos Ion Guta and Bogdan Mihalescu................................................................. 27

FUB_ECO_03_ECEC
Simulation Supporting Concurrent Research Engineering: Electrifying Auxiliaries for Low Carbon Conventional Vehicles
Claudia Mathis, Alfred Steinhuber and Raul Estrada Vazquez................................. 32

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A Validation of Pace Rating using Video Technology
Peeradaech Suwittayaruk and Dirk Van Goubergen ............................................ 39

12.30 - 13.30
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Wednesday, 18th April 2012

13.30 – 14.30

MEETING ROOM: 13.30 – 14.30
QUALITY ASSURANCE
Chair: Catalin Leordeanu, POLITEHNICA Univ. of Bucharest, Romania

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Janek Götze, Egon Müller, Andreas Rutsch and Christian-Andreas Schumann ................................................................. 45

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Miron Zapciu and Nicolae Boicea .......................................................................................................................... 49

14.30 - 15.00
COFFEE BREAK

MEETING ROOM - 15.00-17.30
LEARNING, DIAGNOSIS AND SECURE TELECOM SYSTEMS
Chair: Dan Stefanouli, POLITEHNICA Univ. of Bucharest, Romania

APTEC_01
Supporting Learning-By-Doing Situations by Semantic Technologies
Danail Dochev and Gennady Agre .......................................................................................................................... 49

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Ignazio Infantino, Giovanni Pilato, Riccardo Rizzo and Filippo Vella ................................................................. 54

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Andreea Udrea and Mihai Tanase .......................................................................................................................... 59
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COMTEC_02
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Ana-Delia Sâmbotin and Mugurel Ionuț Andreica ............................................................ 93

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Security Communication Layer for Public Distributed Reporting Services
Decebal Popescu, Ciprian Dobre, Florin Pop, Nirvana Popescu and Valentin Cristea ................................................................. 100

17.30 - 18.30
GUIDED TOUR

A Guided tour of the facilities at the University POLITEHNICA of Bucharest is open to all participants. We leave together as a group from the hotel to the University.

If you wish to go there by yourself then see below:

From the Marriott hotel to UPB, one has to take bus 136 (in front of Marriott is the bus station called Piata Arsenalului), and take off at bus stop called UPB (Piata Arsenalului - Spitalul Dr. Burghelu - Dr.mihai Ciuca - Univ. Nationala De Aparare - Piata Leul - Bd. G-ral Vasile Milea -UPB).
Alternatively, from Marriott go to Izvor subway station (5 min walk), and take M1 metro towards Preciziei (look for the subway marked with Preciziei), route: Izvor – Eroilor - Politehnica. UPB is right next to the subway exit.

FREE EVENING
Thursday, 19th April 2012

HALLWAY FIRST FLOOR
Registration
08.30 - 17.00

09.00 – 10.00

MEETING ROOM: 09.00 – 10.00
INVITED SPEECH
Chair: Nicolae Vasiliu, POLITEHNICA Univ. of Bucharest, Romania

Challenges and Trends in Software Service Based Systems
Valentin Cristea, POLITEHNICA University of Bucharest, Romania

10.00 - 10.30
COFFEE BREAK

10.30 - 12.30

MEETING ROOM - 10.30-12.30
CLOUD COMPUTING
Chair: Dan Stefanou, POLITEHNICA Univ. of Bucharest, Romania

WEBTEC_02_CLOUD
ReC²S: Reliable Cloud Computing System
Alecsandru Patrascu, Catalin Leordeanu, Ciprian Dobre
and Valentin Cristea

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Thursday, 19th April 2012

**ECEC_03_02_CLOUD**
Temperature monitoring and control with cloud instrumentation
Petru Adrian Coffas, Daniel Cotfas, Ramona–Georgiana Oros, Doru Ursutiu and Cornel Samoila

**WEBTEC_01_CLOUD**
Social Cloud for personalized information retrieval
Alexandru Agape

**WEBTEC_03**
Digua: Minifier and Obfuscator for Web Resources
Alex Ciminian and Ciprian Dobre

12.30 - 13.30
LUNCH BREAK

13.30 - 14.30

**MEETING ROOM: 13.30 – 14.30**
**TUTORIAL**
Chair: Dan Stefanou, POLITEHNICA Univ. of Bucharest, Romania

Detection of Human Activities and Human Intentions through Cognitive Architecture
Ignazio Infantino, ICAR-CNR, Palermo, Italy

14.30 - 15.00
COFFEE BREAK

15.00 - 17.30

**MEETING ROOM - 15.00-17.30**
**COLLABORATIVE AND KNOWLEDGE ENGINEERING**
Chair: Ciprian Dobre, POLITEHNICA Univ. of Bucharest, Romania

**ECEC_07_01**
Collaborative Product Design & Development Process Modeling
Bruno Raffaele Trinchera
Thursday, 19th April 2012

ECEC_08_01
A Semantic Adaptive Framework for Collaborative Systems
Aymen Kamoun, Said Tazi and Khalil Drira

FUB_KNOW_01
Metaknowledge for Intelligent Simulation
Tudor Niculiu, Maria Niculiu and Sorin Cotofană

ECEC_10_01_FUB
Practical Solutions for Small Hydro Power Plant Design
Vlad Florin Pîrăianu and Cornel Ilinca

FUB_ECO_01
Estimation by Simulating the net Heat Transfer Rate into aquatic Ecosystems
Gabriela E. Dumitran and Liana I. Vuta

CONFERENCE DINNER – 20.00 -23.00

The conference dinner will be held at the following restaurant

Hanu' Berarilor
(Casa Oprea Soare) | Vezi harta
Str. Poenaru Bordea, nr. 2
Tel: 021 336.80.09
http://www.hanuberarilor.ro/ro/despre-noi

As the restaurant is within walking distance from the hotel we will leave the hotel at 7.30 p.m for dinner.
Friday, 20th April 2012

HALLWAY FIRST FLOOR
Registration
08.30 - 09.00

09.00 – 10.00

MEETING ROOM: 09.00 – 10.00
ONLINE COMMUNITIES
Chair: Dan Stefanouli, POLITEHNICA Univ. of Bucharest, Romania

MEDIATEC_01
Computer Technology: A Tool in the hand of the Artist?
Canan Hastik and Arnd Steinmetz ................................................................. 35

APTEC_03_ETEC
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Elena Burceanu, Ciprian Dobre and Valentin Cristea ........................................... 39

10.00 - 10.30
COFFEE BREAK

10.30 - 12.00

MEETING ROOM- 10.30-12.00
TELECOM SYSTEMS
Chair: Dan Stefanouli, POLITEHNICA Univ. of Bucharest, Romania

COMTEC_05
Benchmark Analysis for Advanced Distributed Data Storage for Heterogenous Clusters
Catalin Negru, Florin Pop, Ciprian Dobre and Valentin Cristea ............................. 67
Friday, 20\textsuperscript{th} April 2012

COMTEC\_01\_MEDIA
Proposal of a Smooth Channel Switching Mechanism for P2P Streaming and its Application
Naomi Terada, Eiji Kominami, Atsuo Inomata, Kazutoshi Fujikawa, Eiji Kawai and Hideki Sunahara ................................................................. 73

COMTEC\_03
Wireless Router as a Physical Access Control System (WRPACS)
Dragos George Comaneci, Silvia Cristina Stegaru and Ciprian Dobre ............... 78

MEETING ROOM 12.00 - 12.15  BEST PAPER
CLOSING SESSION AND BEST PAPER AWARD
Chairs: Ciprian Dobre, Nicolae Vasiliu and Dan Stefanou, POLITEHNICA Univ. of Bucharest, Romania

SEE YOU ALL

APRIL 2013
FOR
FUBUTEC’2013
ECEC’2013
And
EUROMEDIA’2013

Location to be decided soon!!!

Track proposals and tutorial proposals can be sent in by September 30\textsuperscript{th}, 2012

Information on all 2012-2013 EUROSISS Events can be found on http://www.eurosis.org
Conference Map

Bucharest Metro Map
EUROSIS was borne out of discussions with the European Community to set up a new kind of Society, which would be project-driven instead of driven by pure membership and conferences.

The aim of the new Society will be to set up topic related Technical Committees which will link directly to European Projects in the field of computer simulation and related areas and to act as a knowledge pool for future European Networks of Excellence, like MOSAIC.

If you would like to receive more information about EUROSIS, please contact

Philippe Geril  
EUROSIS-ETI  
Greenbridge NV  
Wetenschapspark 1  
Plassendale 1  
B- 8400 Ostend  
Belgium  
🤖 Tel: +32.59.255.330  
✍ Fax: +32.59.255.339  
Email: Philippe.Geril@eurosis.org

Please send me info on EUROSIS:  
Name: ...............................................................................................................
Address: ...........................................................................................................
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Telephone .........................................................................................................
Fax: ...................................................................................................................
Email: ..............................................................................................................