

Agricultural Informatics 2013

The past, present and future of agricultural informatics International Conference

<http://nodes.agr.unideb.hu/ai2013>

The past in agricultural informatics

Anniversaries

35 years of research, development and education in ICT

The Hungarian Association of Agricultural Informatics is 15 years old

The UD CAAES ECDL examcentre is 15 years old

The agricultural informatics engineer education is 10 years old

Present and future

Innovative information technologies in agriculture

ICT strategies in the agri-food sector

Preparing for the new challenges



University of Debrecen
Centre for Agricultural and Applied Economic Sciences

8-9 November 2013
Debrecen

Agricultural Informatics 2013 International Conference
The past, present and future of agricultural informatics
8-9 November 2013, Debrecen, Hungary

Main Patron

Prof. Dr. János Nagy, president of Centre for Agriculture and Applied Economic Sciences

Patrons

Dr. István Kapronczai

Director General, Research Institute of Agricultural Economics

Dr. Éva Laczka

Deputy President for Economic Statistics, Hungarian Central Statistical Office

Dr. Dávid Mezőszentgyörgyi

Director General, National Agricultural Extension, Rural Development and Training Institute

Dr. Márton Oravecz

President, National Food Chain Safety Office

Dr. Károly Pető

Dean, Faculty of Applied Economics and Rural Development, University of Debrecen

Prof. Dr. József Popp

Head of Doctoral School, Károly Ihrig Doctoral School of Management and Business

Bence Toronyi

Director General, Institute of Geodesy, Cartography and Remote Sensing

Guy Waksman

President, European Federation for Information Technology in Agriculture Food and the Environment (EFITA)

Organisers

UD University of Debrecen, Faculty of Applied Economics and Rural Development

HAAI Hungarian Association of Agricultural Informatics

HAS Debrecen Regional Committee of the Hungarian Academy of Sciences, Agrarian-economy Committee

EFITA European Federation for Information Technology in Agriculture, Food and the Environment

Co-organisers

Corvinus University of Budapest, Faculty of Horticultural Science, Department of Biometrics and Agricultural Informatics

University of Pannonia Georgikon, Faculty Department of Economic Methodology

University of Szeged, Faculty of Engineering

Kaposvár University, Faculty of Economic Science, Department of Informatics

Hungarian Association for Geoinformation (HUNAGI)

John von Neumann Computer Society (NJSZT)

Program Committee

Miklós Herdon (Chair) (HAAI, University of Debrecen)
István Alföldi, John von Neumann Computer Society
Zacharoula Andreopoulou, Aristotle University of Thessaloniki
Péter Balogh, University of Debrecen
Christos Batzios, Aristotle University of Thessaloniki
Charles Burriel, Agrosup-Eduter
János Busznyák, University of Pannonia
Máté Csák, University of Pannonia
János Farkas, Kaposvár University
Márta Gaál, Corvinus University of Budapest
Liviu Gaceu, University of Transilvania
Zsolt Guthy, University of Debrecen
György Hampel, University of Szeged
Ian Houseman, EFITA
Levente Hufnagel, Corvinus University of Budapest
László Huzsvai, University of Debrecen
András Ittész, Corvinus University of Budapest
Árpád Endre Kovács, Szent István University
György Kovács, CTS Ltd.
Márta Ladányi, Corvinus University of Budapest
András Nábrádi, University of Debrecen
Ilona Nagyné Polyák, University of Debrecen
Kálmán Rajkai, Hungarian Academy of Sciences
Gábor Remetey-Fülöpp, HUNAGI
Tünde Rózsa, Hungarian Association of Agricultural Informatics
Michael Salampasis, Alexander Technological Educational Institute of Thessaloniki
Zsigmond Gábor Szalay, Szent István University
Károly Szenteleki, Hungarian Association of Agricultural Informatics
Róbert Szilágyi, University of Debrecen
Tibor Tarnóczy, University of Debrecen
László Várallyai, University of Debrecen
Mónika Varga, Kaposvár University
Szilvia Vincze, University of Debrecen
Jerzy Weres, Poznan University of Life Sciences
Havlicek Zdenek, Life Science University
Krisztina Zimányi, Budapest Business School

Organising Committee

Róbert Szilágyi (Chair) (HAAI, University of Debrecen)
Mária Bakó, University of Debrecen
Szilvia Botos, University of Debrecen
Margit Csipkés, University of Debrecen
Judit Fróna, University of Debrecen
István Füzesi, University of Debrecen
Sándor Kovács, University of Debrecen
Szabolcs Kovács, University of Debrecen
Péter Lengyel, University of Debrecen
Lajos Nagy, University of Debrecen
János Pancsira, University of Debrecen
Ádám Péntek, University of Debrecen
Gergely Ráthonyi, University of Debrecen
Csilla Sóvágó, University of Debrecen
Szilvia Szőke, University of Debrecen

Invited Keynote Speakers

Prof. Fedro Zazueta (University of Florida, USA):

IT in extension, research and teaching: Convergence for the 21st Century



Prof. Fedro Zazueta has been with the University of Florida since 1982 and currently serves as Associate CIO. He is charged with the Direction of the Office of Academic Technology and he is also a tenured professor of Agricultural and Biological Engineering. His main responsibilities are to provide leadership and direction to ensure quality IT services for students, faculty and staff that relate to the teaching, research, and the engagement mission of the University of Florida. His some carrier highlights: President of the International Commission of Agricultural and Biological Engineering (CIGR) 2011-2012, Member of the Club of Bologna, and Fellow of the American Society of Agricultural and Biological Engineers (ASABE). Produced numerous publications and software related to computer applications in education and extension, agriculture and water management. Received several awards.

Prof. Gerhard Schiefer (University of Bonn, Germany):

Towards transparency in the food chain



Prof. Gerhard Schiefer 1979-1987 Associate Professor and Professor of Agricultural Economics and Operations Research, University of Kiel; 1987 Professor, University of Hohenheim; since 1990 Professor and Chair, University of Bonn. *Further activities:* 1979-83 founding member of an agribusiness consulting and software company since 1985 CEO of a non-profit research enterprise for international development; 1989-91 chairman of the German national association for informatics in agribusiness; 1992-96 editor; Journal for Agricultural Informatics (in German); 1996-97 founding president of the "European Federation for Information Technology in Agriculture, Food and the Environment (EFITA)". *Research focus:* Agribusiness, food industry, agri-food supply chains, service institutions in the agri-food sector.

Prof. Charles Burriel (Agrosup - Dijon, France):

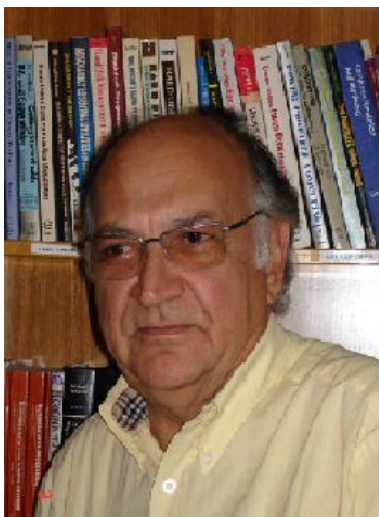
Development of Knowledge Data Bank (KDB) for education and training, and professional usages



Prof. Charles Burriel is Professeur Agrégé – Management & and applied Computing AGROSUP-EDUTER Dijon – France. DES es Sciences Economiques; Agrégation d'économie et gestion; Maitrise de Sciences Economiques; Maitrise de Géographie Economique et Gestion. Teaching experience: MSc, Information System Management (Agrosup), B in A&H: ICT for non-specialist (University of Burgundy), Distance learning about Digital culture, Communication for Engineer and researcher (Agro Paris Tech), Applied Training sessions - 2/year. His responsibilities: Coordinator of Certi-Org LLP EU project (Certification for handicapped people); Coordinator of AgroFE LLP EU project (Certification in Agro-Forestry). Contributions: Regional Council: advice and studies related to ICT in local – regional development and in rural areas; CanalAgri/AgriWebTv: diffusion of 'Agriculture' related professional information; Watch / survey / studies: Collaborative working, Digital video, Richmedia in the context of distance learning.

Prof. Alexander B. Sideridis (AUA, Greece):

Present and future e-Government advances at the service of rural area citizens



Prof. Alexander B. Sideridis is Head of the Informatics Laboratory of the Agricultural University of Athens and President of the Greek Scientific Council for the Information Society. He has published over 200 scientific papers and research books, more than 250 feasibility studies, 32 books of Informatics for State Education Institutions and a large number of white papers and scientific deliverables for European research projects in the areas of Management & Decision Support Systems, Advanced Computational Numerical Modeling, Informatics & Impact of Computers in Society, e- Government and Agricultural Informatics.

Prof. Ir. Adrie J.M. Beulens (LEI Wageningen UR, The Netherlands):

Innovation and Future Internet: Virtualization and Internet of Things are more than just buzz words



Prof. Ir. Adrie J.M. Beulens, Chair LDI-INF group, is Professor of Information Systems. His expertise includes: Information Systems, Information Management, Model and Knowledge Based DSS, Logistics and Operations Management in Supply Chain Networks. He supervised more than 15 PhD's. Prof. Beulens is member of Netherlands Society for Operations Research and its section NGB, International Food and Agribusiness Management Association, Dutch Association of Informatics, Dutch association of Informatics Professionals in the Food and Agribusiness (VIAS), IFIP-TC7 representative of the Netherlands, member of TC7.6, Gesellschaft für Operations Research, Dutch Association of Chartered Informatics professionals. He authored and co-authored many papers and book chapters. Currently he is a member of the Architecture Board within the Future Internet Public Private Partnership Programme (FI-PPP) on behalf of the SmartAgriFood project.

Programme

Friday (08/11/2013)

09.30	Registration (Lecture Room 4, Main Building 2nd floor)	
10.00	Opening Ceremony (Lecture Room 4, Main Building 2nd floor)	
	Welcomes:	
	Károly Pető (dean), József Popp (head of doctoral school), András Nábrádi (vice rector)	
10.10	MAGISZ Harnos Zsolt Díj kiosztó / HAAI Zsolt Harnos Prize Ceremony	
10.15-11.00	Plenáris ülés I. / Plenary session I. (Lecture Room 4, Main Building 2nd floor)(in Hungarian)	
	Elnök/Chair: Popp József, Nábrádi András	
P11	Kapronczai István	Makrogazdasági agrárinformatikai rendszerek fejlődése Magyarországon a rendszerváltás után (<i>The development of macro-economic agro-informatics systems in Hungary following the changes of the regime</i>)
P12	Herdon Miklós, Kovács György, Guthy Zsolt	Informatikai oktatás, kutatás és fejlesztés az elmúlt 35 évben (<i>Teaching, researching and developing informatics over the past thirty-five years</i>)
P13	Vincze Szilvia	A Debreceni Egyetem Agrár- és Gazdálkodástudományok Centrumának információs portálja (<i>The information gateway of the Centre for Agricultural and Applied Economic Sciences of the University of Debrecen</i>)

Coffe Break

11.30-12.45	Plenáris ülés II. / Plenary session II. (Lecture Room 4, Main Building 2nd floor)(in Hungarian)	
	Elnök/Chair: Pető Károly, Kapronczai István	
P21	Mezőszentgyörgyi Dávid, Kaszás Zoltán	Az agrár informatikai fejlesztések ágazati hatásai az EU finanszírozás tükrében (<i>Sectorial effects of developments in agricultural informatics against the background of EU financing</i>)
P22	Palotay Szilveszter	Egységes alapok, avagy EKOP 1.2.17/A és ami mögötte van (<i>Uniform bases or EKOP 1.2.17/A and whatever there is behind it</i>)
P23	Kemény Gábor	Mezőgazdasági Kockázatkezelési Rendszer - új informatikai rendszer az időjárás kockázatok kezelésének támogatására (<i>Risk management system in Agriculture – A new informatics system to support the risk management of weather hazards</i>)
P24	Dienes-Borbély Nóra	A termőföld árának mérése - módszertani fejlesztések a KSH agrárstatisztikájában (<i>Assessing arable land prices – methodological developments in the agricultural statistics of the Hungarian Central Statistical Office</i>)
P25	Józwiak Ákos, Vörös Zsuzsanna	Az ÉlelmiszerLánc-Biztonsági Stratégia informatikai relevanciája - különös tekintettel az e-Learning alkalmazására (<i>The relevance of strategic informatics for the food chain – with a special view to the application of e-learning</i>)

Lunch

13.45-14.30	Plenáris ülés III. / Plenary session III. (Lecture Room 4, Main Building 2nd floor)	
	Elnök/Chair: Mónika Varga, Liviu Gaceu	
P31	Alexander B. Sideridis	Present and future e-Government advances at the service of rural area citizens
P32	Charles Burriel	Proposal for a new approach of accredited credits in American University = The UIUlink platform
P33	Gábor Remetey-Fülöpp	EO/GI opportunities for market players in Agricultural Informatics

14.30 **MAGISZ diplomadolgozat díjátadás/HAAI Student Thesis Awards**

15.00-16.20	Videoconference - Plenary session (Lecture Room 4, Main Building 2nd floor) HAAI Plaque Prize Ceremony Elnök/Chair: Alexander B. Sideridis, Róbert Szilágyi	
VP1	Prof. Fedro Zazueta (University of Florida)	IT in extension, research and teaching: Convergence for the 21st Century
VP2	Prof. Gerhard Schiefer (University of Bonn)	Towards transparency in the food chain
VP3	Prof. Ir. Adrie J.M. Beulens (LEI Wageningen)	Innovation and Future Internet: Virtualization and Internet of Things are more than just buzz words
VP4	Prof. Charles Burriel (AgroSup, Dijon)	Development of Knowledge Data Bank (KDB) for secondary, higher, and professional education and training, and professional usages

Coffe Break

16.30-18.00	HAAI-HAICTA Videoconference session (Lecture Room 4, Main Building 2nd floor) Elnök/Chair: Christos Batzios, László Várallyai	
HH1	Sándor Kovács, Péter Balogh, László Huzsvai	Investigating the long memory property of the Hungarian market pig prices by using detrended fluctuation analysis
HH2	Ioakeim Tzoulis, Zacharoula S. Andreopoulou	Wood tracking information systems to confront illegal logging
HH3	Mónika Varga, Sándor Balogh, Béla Csukás	Implementation of Direct Computer Mapping for sustainable development
HH4	Christos Emmanouilidis, Panagiotis Fousekis, Alexei Proskynitopoulo	An analysis of spatial linkages in the EU pork market
HH5	Péter Fejes Tóth, Márta Ladányi	Teaching mathematical statistics using computers at the campus of agricultural sciences of Corvinus University Budapest
HH6	K. Giannousi, I. Avramidis, C. Dendrinou-Samara	Cu-based nanoparticles as nano-agrochemicals

16.30-18.00	Session A1 (Training Room 1, Building "D" Ground floor) Elnök/Chair: Béla Csukás, Szilvia Szőke	
A11	György Hampel, Kinga Dancsházy	Creating a Virtual Learning Environment
A12	Liviu Gaceu	Nutrilib Project - short review upon investigation methodology
A13	Oprea Bianca Oana	Investigation methodology about labels information content of the meat products from Romania, in accordance with European Legislation
A14	Cristina Mihail Popovici	Effect of Microwave and Convective Drying Process on Antioxidant Potential of Agro-Food Products
A15	Michael T. Maliappis, Alexander B. Sideridis, Constantinos P. Yialouris	Knowledge Versioning Management in Agriculture: Implementation and Application to Pest Management
A16	Constantina I. Costopoulou	The Use of Smartphones in Agricultural m-Government

Coffe Break

18.10-19.25	Session A2 (Training Room 1, Building "D" Ground floor) Elnök/Chair: Márta Ladányi, Sándor Kovács	
A21	Györk Fülöp	Mapping solution of INLAND (Interscale Landscape Diversity Modelling Methodology)
A22	Béla Csukás, Mónika Varga, Sándor Balogh	Direct Computer Mapping of process models in applied life sciences
A23	Sándor Balogh, Mónika Varga, Béla Csukás	Genetic Algorithm, Supporting DCM Based Problem Solving
A24	Orsolya Gyöngyi Varga, Zoltán Túri	Application of GIS to Present Rural Touristic Values of Bihar–Hajdú-Bihar Euroregion
A25	András Tankovics, Sándor Balogh, Mónika Varga	Testing of a process model based Web interface for integration of small family farms in sector spanning traceability

16.30-18.00	Session B1 (Training Room 2, Building "D" Ground floor) (in Hungarian)	
	Elnök/Chair: Tamás János, Gaál Márta	
B11	Riczu Péter, Nagy Attila, Mesterházi Péter Ákos, Tamás János	Egy intenzív almaültetvény komplex vegetációs vizsgálata távérzékelési műszerekkel (<i>Complex vegetation survey in a fruit plantation by spectral instruments</i>)
B12	Mesterházy Ildikó, Mészáros Róbert, Pongrácz Rita	A magyarországi agroklimatológiai adottságok várható változása a XXI. század végéig három regionális klímamodell tükrében (<i>Expected changes in the agro climatological conditions of Hungary until the end of the 21st century on the bases of three climatic models</i>)
B13	Kozma-Bognár Veronika, Berke József	Hiperspektrális osztályozó eljárások összehasonlítása felszínborítási kategóriák megállapításánál (<i>A comparison of hyperspectral classification procedures in determining surface cover categories</i>)
B14	Busznyák János, Csák Máté	GIS technológiák oktatása a Pannon Egyetem Georgikon Karán (<i>Teaching GIS technologies at the Georgikon Faculty of Pannon University</i>)
B15	Busznyák János, Sisák István	Új térbeli adatstruktúrák a Georgikon Térképszerveren (<i>New spatial data structures on the Gerogikon map server</i>)

Coffe Break

18.10-19.25	Session B2 (Training Room 2, Building "D" Ground floor) (in Hungarian)	
	Elnök/Chair: Busznyák János, Balogh Péter	
B21	Várallyai László	ECDL vizsgaközpontunk elmúlt 15 évének tapasztalatai (<i>Experiences of the ECDL examination centre over the past fifteen years</i>)
B22	Huzsvai László, Szőke Szilvia	A talaj hőáramlásának modellezése R-ben (<i>Modelling heat convection of the soil in R</i>)
B23	Várallyai László	A talajszennyezés gazdasági és társadalmi faktorai (<i>Economic and social factors of soil pollution</i>)
B24	Busznyák János, Csák Máté	Informatika, múlt és jelen a Georgikonon (<i>Informatics, its past and present at Georgikon</i>)
B25	Lengyel Péter, Pancsira János	Idegennyelvi oktatás támogatása Scorm alapú online tananyagok fejlesztésével (<i>Supporting foreign language teaching by developing Scorm-based online curricula</i>)

16.30-18.00	Session C1 (Training Room 3, Building "D" Ground floor) (in Hungarian)	
	Elnök/Chair: Huzsvai László, Salga Péter	
C11	Bánszki Attila, Füzesi István	eMABP – elektronikus Magyar Agrár Beszerzési Piacter bemutatója (<i>The introduction of eMABP – electronic Hungarian Agricultural procurement market</i>)
C12	Soltész Angéla, Balogh Péter	A kocaartás termelési és gazdasági kockázatának vizsgálata (<i>An analysis of the production and economic risks of keeping sows</i>)
C13	Csipkés Margit, Nagy Lajos	A biomasszából nyerhető energia ár- és termelési kockázatának figyelembevétele a földhasználat tervezése során (<i>The consideration of the price and production risks related to energy from biomass in land use planning</i>)
C14	Kovács Flórián, Ladányi Márta, Fejes Tóth Péter, Nagy Géza	Az ANOVA feltételeire vonatkozó vizsgálatok és adatkezelési technikák – Esettanulmány a mentafélék illóolaja <i>Ramularia menthicola</i> kórokozó elleni in vivo hatékonyságának feltárására (<i>Analyses and data management technologies related to the conditions of ANOVA – A case study on exploring the in-vivo efficiency of the volatile oil from mints against the pest of Ramularia menthicola</i>)
C15	Buzás Ferenc, Kiss Sándor	Automatizált értékelési modell állatállományok fedezetértékeléséhez (<i>An automated model for the evaluation of the break-even status of animal stocks</i>)

Coffe Break

18.10-19.25	Session C2 (Training Room 3, Building "D" Ground floor) (in Hungarian) Elnök/Chair: Rózsa Tünde, Nagy Lajos	
C21	Salga Péter	Minősített áruátvétel tejipari és malomipari vállalatoknál (<i>Classified receipt of goods in milk and milling companies</i>)
C22	Halász Attila	Vállalatirányítási rendszer bevezetése egy élelmiszerfeldolgozó vállalatnál (<i>The introduction of a corporate management system in a food processing company</i>)
C23	Sipos Zsolt	Hogyan segíti az androidos mobil alkalmazás az üzletkötők tevékenységét? (<i>How does the application of android mobile phones help the activities of salespersons?</i>)
C24	Rózsa Tünde	ERP rendszerek összehasonlító elemzésének helye és szerepe a kiválasztásban (<i>The place and role of the comparative analysis of ERP systems in selection</i>)
C25	Bakó Mária, Aszalós László	Agrár-adatbányászat korrelációs klaszterezéssel (<i>Agricultural data-mining with correlation clustering</i>)

16.30-18.00	Session D1 (Student papers) (Training Room 4, Building "D" Ground floor) (in Hungarian) Elnök/Chair: Péntek Ádám, Bakó Mária	
D11	Filep Miklós Gergely	A Mádi hegyközség kiemelt dűlőinek jellemzése a kemometria módszerével
D12	Kádas Ivett	Integrált információs rendszer és pénzügyi-számviteli moduljainak alkalmazása a Bükk Nemzeti Park Igazgatóságnál, valamint más nemzeti parkokban
D13	Dávid Zsombor	Agrorobotika-fóliasátrak automatizálása Lego Mindstorms robotok segítségével
D14	Balázs Kocsi, Judit Oláh	Rationalization of busines processes at Partner-Pont Ltd
D15	Szabóné Berta Olga	A magyar mezőgazdaság gazdasági társaságainak informatikai vizsgálata és eredményei

Coffe Break

18.10-19.25	Session D2 (Training Room 4, Building "D" Ground floor) Elnök/Chair: Oprea Bianca Oana, István Füzesi	
D21	Szilvia Botos	The evolution and the development of broadband network in Hungary
D22	Wesley Esdras Santiago, Bárbara Janet Teruel Mederos, Rafael Augustus de Oliveira, Rodolpho César dos Reis Tinini	Drying of Niagara grapes aiming at generating information for processing, supervision and control
D23	Vladimir Caceres	Mobile System for Assessment and Integrated Pest and Disease in Crop of Ancash Agroexports
D24	Iraj Namdarian	The Use of Business Intelligence Components as a proficient tool in Monitoring the Operations and Cost Management in Agricultural Business Sector
D25	Róbert Szilágyi, Imre Labancz	Mobile Internet user aspect in Hungarian agriculture

19.30 **Reception**

Saturday (09/11/2013)

09.00	Workshops	
	Research and Development on Agro-informatics – Vision 2020	
	AgroFe Leonardo Projekt	
	Public Administration and Agro-informatics MSc	

Conference location

University of Debrecen, Centre for Agricultural and Applied Economic Sciences
Debreceni Egyetem Agrár- és Gazdálkodástudományok Centruma

H-4032 Debrecen, Böszörményi str. 138., Hungary

4. Előadótér, főépület, 2. emelet és „D” épület 1, 2, 3, 4. számítógépterem

Registration:

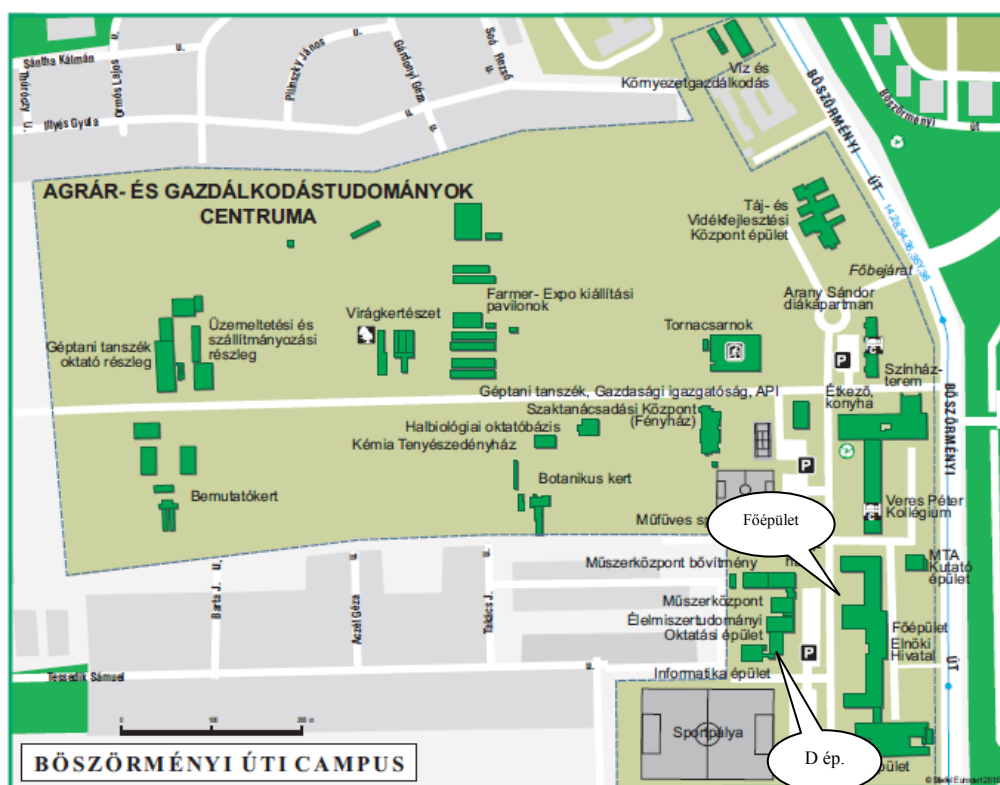
Lecture Room 4, 2nd floor Main Building
4. előadó, Főépület 2. emelet

Lunch / Ebéd:

Campus Restaurant / Étterem

Reception / Állófogadás (08/11/2013, 19:30):
Kazánház

Campus Map



Supported by



**Károly Ihrig Doctoral School of
Management and Business**



**Research Institute of Agricultural
Economics**



Dyntell Software LTD.



**Institute of Geodesy, Cartography and
Remote Sensing**



**Introduction of the National Food Chain
Safety Office**



**National Agricultural Advisory,
Educational and Rural Development
Institute**



CTS-Informatika LTd.

P@rtner.ERP

Vállalatirányítás felsőfokon

- A Pannon Szoftver Informatikai Kft. **15** éve fejleszti, értékesíti és vezeti be üzleti rendszereit.
- Jelenleg **4** országban vagyunk jelen érdekeltségeinkkel.
- Magyarországon **50** jól képzett, lendületes munkatársunk van, akik átlagosan **8** év szakmai tapasztalattal rendelkeznek.
- Cégünknel a **stabilitást** és a **kiszámíthatóságot** **svájci** befektetői háttér biztosítja.

Céljaink

Célunk, hogy partnerei legyünk dinamikusan változó világunkban, segítve cégének lépést tartani, irányt mutatni az információtechnológia útvesztőjében.

Olyan újszerű, minden szempontból hasznos és hatékony, teljes körű megoldást kínálunk középmezőre, kis- vagy akár induló vállalkozások számára, amely ügyfeleink céljait a legsikeresebben kielégíti.

Segítjük ügyfeleinket abban, hogy értéket teremtsenek. Támogatjuk őket a piacuk jobb kiaknázásában és új, akár külföldi piacok megszerzésében.

Projektek

Az ERP (integrált vállalatirányítási rendszer) projektek sikeres megvalósítása nem egyetlen nagy lépést jelent, hanem cége üzleti elképzeléseivel és kultúrájával összhangban lévő több lépéses folyamatot.

A projektek egyedi, bár azonos megnevezésű és célú építőkockákból épülnek fel. Minden egyes partnercég esetén az elérendő, aktuális célok azok, amelyek meghatározzák az építőkockák tartalmát.

A folyamat, amelyet követünk megoldásainkban, úgy gondoljuk, rugalmas és minden egyedi igényhez megfelelő keretet biztosít. Lehetővé teszi, hogy a projekt folyamán kialakuló képet partnereink folyamatosan követhessék, és szükség szerint közösen módosítsuk.

Célunk az, hogy a kezdeti elképzelések tervekké, adatokká, látvánnyá és kényelmes megoldássá váljanak.

Technológiák

Termékeinket mi magunk fejlesztjük. Nagy gondot fordítunk az új, korszerű, szabványos technológiák bevezetésére és alkalmazására, amelyek innovatív megoldásaink alapját képezik. Ügyfeleink üzletmenetét megismerni kívánó konzulensekkel és képzett szakembergárdával állunk az Ön rendelkezésére.

CALL FOR PAPERS



XII WORLD CONGRESS ON COMPUTERS IN AGRICULTURE

July, 27th-30th. SAN JOSE, COSTA RICA

About WCCA

The XII World Congress of Computers in Agriculture is a global collaborative effort by international organizations working on Information and Communication Technologies (ICT) applied to agriculture, natural resources and associated disciplines.

The Congress provides a forum for related professionals to exchange knowledge on applications and developments in the use of ICT. Authors are invited to participate. Topics include new applications of well-established and understood technologies to innovative and entrepreneurial applications of emerging technologies, in addition to issues related to policy and knowledge dissemination. Contributions from various countries will allow a broadened perspective for all attending.

Activities

Preconference technical workshops and a post conference technical tour will be available. Costa Rica is one of the most visited international tourism destinations with numerous entertainment and cultural activities. ***Participants are encouraged to submit work-shop proposals.***

Venue

The conference will be held at the University of Costa Rica's Rodrigo Facio Campus, San Pedro, San José, Costa Rica.

Papers and Posters

Submit an abstract for papers and posters by November 1st, 2013 at the congress' website. Full length papers are required by June, 13th, 2014. ***Participants are encouraged to submit session proposals.***

Session Topics

WCCA 2014 will cover a wide array of topics which ICT applications in all aspects of agriculture. Topics include but are not limited to:

- Adoption and Extension
- Agricultural Logistics
- Artificial intelligence
- Biosystems Engineering
- Cloud Services and Applications
- Decision Support Systems
- e-AgBusiness and Production Chain Management
- Education/Training, Distance Learning and Professional Accreditation
- Emerging Technologies
- Field Data Acquisition and Recording
- Food Safety Control/Tracking-Tracing
- GIS
- Grid Applications
- Information Systems and Databases
- Instrumentation and Control
- Library Science and Knowledge Representation
- Mechatronics and Robotics
- Modeling and Simulation
- Mobile Applications
- Packaging Science and Technology
- Portable and Nomadic Computing
- Precision Agriculture
- Rural and Environmental Development and Policy
- Social Media in Agriculture
- Semantic Computing
- Web 2.0, Web Services, Portals and Internet Applications
- Wireless and Sensor Networks

To submit abstracts, register and learn more about WCCA 2014 visit:

wcca2014.ucr.ac.cr

José Francisco Aguilar, Universidad de Costa Rica

Chairman of the Local Organizing Committee

Fedro Zazueta, INFITA

Chairman

Supported by:



UNIVERSIDAD DE
COSTA RICA



NOTES